MAGNETICAL, METEOROLOGICAL AND SEISMOGRAPHIC OBSERVATIONS

MADE AT THE

GOVERNMENT OBSERVATORIES,

BOMBAY AND ALIBAG,

IN THE YEAR

1921

UNDER THE DIRECTION OF

T. K. CHINMAYANANDAM, M.A.

REDUCED AND TABULATED UNDER THE DIRECTION OF

S. K. BANERJI, D.Sc.

Printed by order of His Majesty's Government

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CALCUTTA GOVERNMENT OF INDIA CENTRAL PUBLICATION BRANCH 1926

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CORRIGENDA.

Page											
Page	9	Table	for	February	33d 20h	*for*	924	*read*	·934
,,	11	,,	,,	June	20d 18h	,,	·553	,,	·563
,,	13	,,	,,	September	Date Column	,,	29	,,	28
,,	,,	,,	,,	,,	,, ,,	,,	28	,,	29
,,	,,	,,	,,	,,	29d 16h	,,	·847	,,	·827
,,	,,	,,	,,	,,	,, 18h	,,	·827	,,	·847
,,	14	,,	,,	November	30d 22h	,,	·082	,,	·032
,,	23	,,	,,	January	3d 14h	,,	W	,,	NW.
,,	24	,,	,,	March	21d 4h	,,	blank	,,	NNE
,,	29	,,	,,	January	24d Minimum Mag.	,,	54·0	,,	64·0
,,	34	,,	,,	November	Mean 20h	,,	7·9	,,	75·9
,,	41	Column	,,	May	10d 10h	,,	6	,,	0
,,	44	,,	,,	March	6d	,,	−0·8	,,	+0·8
,,	46	Lower table column	for	February	7h	,,	−5	,,	−10
,,	,,	Lower table column	for	March	7h	,,	−10	,,	−5
,,	57	Table	for	August	† Mean 6h	,,	9	,,	956
,,	59	,,	,,	December	21d Maximum Mag.	,,	1979	,,	979
,,	,,	,,	,,	,,	22d ,,	,,	·001	,,	1001
,,	,,	,,	,,	,,	23d ,,	,,	013	,,	1013
,,	60	,,	,,	January	18d 6h	,,	89	,,	189
,,	64	,,	,,	October	† Mean 20h	,,	267	,,	257

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INTRODUCTION.

The beginning of the year 1921 saw the completion of an almost uninterrupted series of observations at the Government Observatory, Bombay, of meteorological and magnetic phenomena for a period of seventy-five years and of seismic disturbances for a period of twenty-two years. The transference of the magnetic work from Colaba to Alibag in 1904 due to the city of Bombay having decided to have electric *tram service*, caused a certain amount of "discontinuity" in the magnetic records but as comparative observations could be taken at both the stations for a period of two years, this could be allowed for. The results of the seventy-five years' observations have been presented in compact forms in forty-two volumes issued by the Observatory from time to time and two special volumes containing a discussion of the magnetic data collected during the first sixty years. The volumes contained the daily means of the principal meteorological and magnetical elements and thus gave very meagre information regarding their variations to scientific workers and as the later volumes were issued only once in five years, the data for any year could not be in their hands before several years had elapsed. To remedy these defects, it was decided that from 1921 onwards, the volumes should be published annually and that they should give more details regarding the variations of all essential elements. It was at first desired to print the hourly values of the elements thus bringing this Observatory publications in conformity with those of other similar institutions of the world, but the expense stood in the way and the plan had to be curtailed to one of bi-hourly values. It would have been a distinct advantage if the bi-hourly values represented the average values of the quantities for successive periods of two hours, and not their momentary values at the end of every two hours. But the Observatory had all along tabulated the momentary hourly values and this change although for the better had consequently to be postponed to a future date.

The Colaba Observatory is situated almost at the extreme south end of the narrow ridge of land extending about three miles to the south-west of the Fort of Bombay and separating the Harbour from the Back Bay. The level of the Observatory compound is about 32 feet above the mean level of the sea. The co-ordinates giving the position of the Observatory are :—

Astronomical	Latitude 18° 53′ 36″ North. Longitude 72° 48′ 56″ East.	Geodetic	Latitude 18° 53′ 47″ North. Longitude 72° 48′ 47″ East.

The Alibag Magnetic Observatory is situated on the mainland about 18 miles south-south-east of Bombay and its co-ordinates are :—

Astronomical	Latitude 18° 38′·4 North. Longitude 72° 52′·35 East.	Geodetic	Latitude 18° 38′·6 North. Longitude 72° 52′·2 East.

For a general description of the buildings and instruments in both the Observatories see "Magnetical, Meteorological and Seismographic Observations made at the Government Observatories, Bombay and Alibag, 1906 to 1910" and also the similar volume for 1916—20.

Reference is also made to the printed annual report of the Observatory for the year 1921 for a description of the principal features observed during the year and also for a table giving the magnetic characterisation of days according to the international system.

System of observation at Colaba.

Meteorological observations are taken every day, including Sundays, at the hours 6, 10, 14, 16 and 22: the day commencing at midnight, Bombay (Colaba), is reckoned from 0 to 24. The time of observation of each element is fixed and the observations are registered with strict punctuality as follows :—

From 5 minutes to the hour to 2 ,, after the hour.	Extent and description of clouds, state of the weather, occasional phenomena, and direction of the wind.
At 2 ,, ,, ,, ,,	Thermograph standard thermometer, dry bulb. Thermograph standard thermometer, wet bulb.
At 3 ,, ,, ,, ,,	Newman's rain gauge (in wet season).
From 5 ,, ,, ,, ,, to 7 ,, ,, ,, ,,	Thermometer in ground 1 inch deep. Thermometer in ground 9 inches deep.
From 7 ,, ,, ,, ,, to 9 ,, ,, ,, ,,	Newman's standard barometer No. 58 and attached thermometer. Newman's standard barometer No. 48 and attached thermometer.
At 10 ,, ,, ,, ,,	Thermometer attached to barograph.
At 19 ,, ,, ,, ,,	Surface thermometers in the sun 1 and 8 inches deep.

The maximum and minimum thermometers in the thermometers shed, as also the solar radiation thermometer, are read twice daily at 8 and 16 hours.

Observations made once daily include readings of (1) the ground thermometers 20, 60 and 132 inches deep, made at 14 hours, and (2) the nocturnal radiation thermometer made at 8 hours. During the monsoon months Newman's rain gauge is read daily at midnight and the discharges of the syphon of the self-registering pluviograph are also read once or oftener as required. The electric clock controlling the drop of the time balls and the Harbour clock is duly regulated by comparison thrice daily with the standard sidereal clock. Government chronometers, belonging to the Royal Indian Marine and Royal Navy Stores at the Observatory and those received from merchant ships in the harbour, are wound daily or twice a week as required, and comparisons with the standard clock are made with sufficient frequency to render the instruments always ready for issue at call with well-determined rates.

Transit observations of stars for the determination of time for securing the errors and the rates of the sidereal clocks are made every Monday, Wednesday and Friday in the dry months of the year. During the monsoon months no opportunity is lost for observing either the sun or the stars whenever visible. The adjustment of the transit instrument in azimuth is tested frequently by reference to the fixed meridian collimator marks, and level errors are tested and checked once every month. Errors of collimation, level and azimuth are determined once every month except during the monsoon months.

Observations of magnetic declination are made once every month at Colaba about the 15th of each month and the values of declination so obtained are used in comparing the compasses of ships in the harbour.

System of observation at Alibag.

Eye observations of the instruments specified below are taken daily, Sundays included, at 6, 10, 14, 16 and 22 hours at the specified instants of time about the full hour of Greenwich mean time :—

At	19	minutes	to	the	hour	..	Kew Horizontal Force Magnetometer and attached thermometer.
,,	17	,,	,,	,,	,,	..	Kew Vertical Force Magnetometer and attached thermometer.
,,	15	,,	,,	,,	,,	..	Declination Magnetometer and thermometer in the Magnetometer room.
,,	11	,,	,,	,,	,,	..	Eschenhagen's Vertical Force Variometer and attached thermometer.
,,	10	,,	,,	,,	,,	..	Watson's Vertical Force Magnetograph and attached thermometer.
,,	9	,,	,,	,,	,,	..	Watson's Declination Magnetograph.
,,	8	,,	,,	,,	,,	..	Watson's Horizontal Force Magnetograph and attached thermometer.
,,	7	,,	,,	,,	,,	..	Eschenhagen's Horizontal Force Variometer and attached thermometer.
,,	6	,,	,,	,,	,,	..	Thermograph in the Magnetograph room and standard thermometer (read twice daily at 6 and 16 hours only).

Deflection experiments, with vibration magnet of magnetometer No. 137, the moment of which is determined every week, as deflector at a distance of 100 cms. on the horizontal force magnetograph and at a distance of 75 cms. on the vertical force magnetograph, are made once every fortnight. Similar deflection experiments with vibration magnet of magnetometer No. 3 as deflector are made once a month for the purposes of check work and corresponding deflection experiments at the same distances are also made every month by the same deflector upon a magnet appropriately suspended over the pillar on the ground floor of the magnetometer tower.

Deflection experiments, with vibration magnet No. 137 as deflector at a distance of 100 cms. on the horizontal force variometer, and at a distance of 75 cms. on the vertical force variometer, are also made once a fortnight.

Observations of vibration and deflection for the determination of absolute horizontal force are made with the Observatory standard instrument No. 7 on Wednesdays and with the auxiliary instru-

ment No. 3 with magnets belonging to magnetometer No. 137 on Mondays. With the same instruments observations of absolute declination are taken every Thursday. Observations of inclination are made with the Schulze's Inductor, which is the Observatory standard instrument, and another Inductor by Otto Toepfer every day in the year with the exception of Sundays and holidays; each of the two Inductor instruments is ordinarily observed on alternate days, but for check work both the instruments are observed simultaneously on Fridays.

Transit observations of stars for the determination of time are made generally on Tuesdays and Fridays in the dry months; during the monsoon months no opportunity is lost of observing the sun or stars whenever visible. The adjustments of the transit instrument are frequently tested by reference to the fixed collimator mark and by level observations; the residual errors of collimation, level and azimuth are determined once every month except during the monsoon months.

Meteorological Instruments.

1. *Standard Barometer.*—The barometer is by Newman and has been in uninterrupted use since the establishment of the Observatory. It reads on an average 0·004″ below the Kew Standard. The height of the barometer is 37 feet above the mean sea-level.

2. *Barograph.*—The instrument is installed in the underground constant temperature room and the variation of pressure is recorded photographically. The tabulations have been made at 7 minutes after the hour in order that the instant may correspond to the time of eye observation and corrected so as to agree with the Newman's standard barometer.

3. *Standard Dry Bulb and Wet Bulb Thermometers.*—On the 26th November 1917, the freezing points were tested and the zero of the dry bulb standard thermometer No. 401 was found to have changed from 32°·6 to 33°·0 F. and that of the wet bulb standard thermometer No. 402 from 32°·5 to 33°·0 F.

4. *Photographic Dry Bulb and Wet Bulb Thermometers.*—The bulbs of these thermometers are placed in the same cage and close to those of the standard dry and wet bulb thermometers. The tabulations of the thermograms have been made at 2 minutes after the hour in order that the instant may correspond to the time of eye observation.

5. *Ground thermometers.*—These thermometers are installed in the standard thatched shed with their bulbs at depths of 1, 9, 20, 60 and 132 inches respectively below the surface.

Ground thermometer No. 3426 by Munro is placed exposed to the sun in the rain-gauge enclosure with its bulb at the depth of one inch below the surface.

6. *Robinson-Beckley Anemograph.*—This anemograph is of the kind designed by Robinson, with improvements by Robert Beckley. It is erected on the old Time Ball Tower, at a height of 58 feet above the ground, and 100 feet above the mean sea-level. The centres of each pair of opposite hemispherical cups are four feet apart, and the diameter of the cups is 9 inches. The diameter of the vanes of the direction recorder is 15 inches and the breadth of the fans 4 inches.

7. *Dines' Anemometer.*—The head-vane has been placed on the old Time Ball Tower at a distance of 6 feet from Robinson-Beckley's cups and 6 inches above their level. The comparison of this instrument with a U-tube pressure gauge showed, on the results of a series of experiments, that the relation between W, the difference in level of the water in inches in the two arms of the U-tube, which is a measure of the pressure of wind, and V, the velocity of wind in miles per hour as indicated in the Colaba Dines' chart, was $W = \cdot 00078\ V^2$ instead of $W = \cdot 00073\ V^2$ which should have been the correct relation if the instrument was in order and in perfect adjustment. The result showed that the Colaba Dines' instrument recorded only 96 per cent. of the true velocity.

The bi-hourly values of wind velocity tabulated in this volume represent the means of Beckley's readings (corrected by the factor 0·733) and the corresponding Dines' readings. The maximum and minimum values have been obtained from Dines' registrations. The directions of wind have been obtained from Beckley's; the daily mean directions have been derived by converting the hourly directions into N or S and E or W components and combining the mean components.

8. *Rain-gauge.*—Newman's rain-gauge, which has been in use since 1845, exposes for the collection of rain drops a circular surface of an average diameter of 12·035 inches, forming the top of the funnel, which opens into a cylindrical vessel below having a diameter of 5·732 inches. Each division of the graduated rod resting on the float represents ·05 inch of rain and the readings of this scale are easily estimated to one-fifth of a division.

9. *Photographic Rain-gauge.*—A description of this instrument will be found in the Introduction to the "Bombay Magnetical and Meteorological observations, 1871 to 1878," page xlvi. For methods of reduction of pluviograph records reference is made to the introduction to the "Bombay Magnetical, Meteorological and Seismographic Observations, 1916—20".

Magnetic Instruments.

Variation Instruments.

The horizontal force, vertical force and declination magnetographs in use at Alibag are all by Watson and are all mounted on isolated pillars in the magnetograph room. They were maintained in continuous action throughout the year. The variation of temperature in 1921 in the magnetograph room is shown below.

Monthly and annual range in temperature (Fahrenheit).

—	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
Maximum ..	84°·1	82°·9	85°·5	88°·8	90°·9	91°·5	88°·3	86°·3	85°·2	88°·0	88°·1	85°·8	91°·5
Minimum ..	82·8	82·1	82·7	85·5	88·5	88·1	85·2	84·0	84·5	85·2	85·7	83·7	82·1

Two Eschenhagen variometers, one for the horizontal force and the other for the vertical force, are also installed in the magnetograph room and are read every day at the hours already mentioned. Another set of Kew Horizontal Force Magnetometer, Kew Vertical Force Magnetometer and Declination Magnetometer is installed in the ground-floor room of the magnetometer building and these are read every day at the hours already specified. The magnetograms have been used in deducing the tabulated results except for a few short periods when the record was defective or missing, in which cases the missing hourly values are supplied from eye observations as far as they are available. The tabulations have been made at 51 minutes of every hour instead of at the full hour in order that the instant may coincide with the full hour of Greenwich mean time.

The scale coefficients of the force magnetographs are obtained every fortnight from deflection observations performed on the instruments with deflectors, as already referred to, at a distance of 100 cms. in the case of H and at a distance of 75 cms. in the case of V magnetographs. The value adopted for any month is the mean of the mean observed value for that month and those for the preceding and succeeding months.

The following table gives the scale coefficients for 1 cm. ordinate on the photographic paper of the force magnetographs.

Instrument.	January.	February.	March.	April.	May.	June.	July	August.	September.	October.	November.	December.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
H. F. Magnetograph.	45·1	44·8	44·8	44·8	44·8	44·8	44·9	45·0	44·9	44·9	44·9	44·8
V. F. Magnetograph.	95·9	95·5	95·6	96·0	96·2	96·3	95·4	95·2	95·2	95·7	95·6	95·5

1γ = ·00001 C.G.S.

The scale coefficient of the declination magnetograph for 1 cm. of ordinate is 10′·28.

The temperature coefficient of the horizontal force magnetograph has been determined by heating experiments and its adopted value is ·000036 in C. G. S. units for 1° F. The temperature coefficient of the vertical force magnetograph was found in the same experiments to be practically nil as no appreciable change in force, after allowing for the actual diurnal change, could be definitely ascertained as being due to temperature effects.

Absolute Instruments.

Two magnetometers have been under observation regularly during the period. Magnetometer No. 7 by Cooke and Sons, which is the standard instrument at Alibag, is of the ordinary type of Kew pattern instruments but is modified and improved in several important details. The other instrument is Magnetometer No. 3 by the Cambridge Scientific Instrument Company and is of the usual Kew pattern. Instrument No. 7 is observed on the second floor of the tower of the magnetometer building, while instrument No. 3 is observed on the first floor, each instrument being permanently allowed to stand on its pillar on the respective floors.

Earth Inductor No. 41 by Schülze of Potsdam with Galvanometer No. 200 by Plath are installed on specially constructed pillars in the room on the second floor, while Inductor No. 108 by Otto Toepfer and its galvanometer are installed in the first floor of the magnetometer building.

Absolute Observations and Base-Line Values.

Declination.

Absolute observations of declination were made once a week with both the magnetometers, No. 7 and No. 3, one after the other.

Base-line values are derived by converting the ordinates corresponding to absolute observations with Instrument No. 7 into angles and subtracting the converted ordinates from the observed absolute *easterly* declination. The values so obtained of the base-lines of the declination magnetograph denote *westerly* declination.

The adopted values are derived by taking overlapping means of 5 successive observations and reducing them to the proper epoch, values for intermediate days being obtained by simple interpolation.

Declination Base-Line Values, 1921.

[0° *plus* tabular minutes.]

Date.		Observed.	Adopted.	Date.		Observed.	Adopted.
		′	′			′	′
January	6 ..	6·9	7·0	July	7 ..	7·7	7·5
	13 ..	6·9	6·9		14 ..	7·2	7·5
	20 ..	6·9	6·9		21 ..	7·5	7·4
	27 ..	6·8	6·9		28 ..	7·4	7·3
February	3 ..	6·9	6·8	August	4 ..	7·3	7·2
	10 ..	6·8	6·8		11 ..	7·1	7·2
	17 ..	6·7	6·8		18 ..	6·9	7·2
	24 ..	6·9	6·9		25 ..	7·4	7·2
March	3 ..	6·8	7·0	September	1 ..	7·2	7·2
	10 ..	7·2	7·2		8 ..	7·5	7·3
	17 ..	7·5	7·2		15 ..	7·2	7·3
	25 ..	7·4	7·4		22 ..	7·1	7·4
	31 ..	7·2	7·4		29 ..	7·4	7·4
April	7 ..	7·5	7·5	October	6 ..	7·7	7·5
	14 ..	7·3	7·6		13 ..	7·8	7·6
	21 ..	7·8	7·7		20 ..	7·4	7·6
	28 ..	8·1	7·8		27 ..	7·7	7·7
May	5 ..	7·8	7·9	November	3 ..	7·6	7·8
	12 ..	7·9	7·9		10 ..	8·1	7·9
	19 ..	7·9	7·9		17 ..	8·1	8·0
	26 ..	7·8	7·9		24 ..	8·1	8·1
June	2 ..	8·1	7·8	December	1 ..	8·0	8·1
	9 ..	7·6	7·7		8 ..	8·2	8·1
	16 ..	7·4	7·7		15 ..	8·2	8·0
	23 ..	7·4	7·6		22 ..	7·9	7·9
	30 ..	7·8	7·5		29 ..	7·8	7·8

Horizontal Force.

Absolute observations of horizontal intensity were made twice a week, on Mondays with instrument No. 3 and on Wednesdays with instrument No. 7. A day's observations comprise a double set of vibration and deflection observations at three distances (22·5 cms., 30 cms. and 40 cms.). In calculating the base-line values the mean of observed values at the two nearer distances has been adopted.

Till the year 1920, the observatory adopted a fixed value for the correction $\log_{10}(1 - \frac{p}{r^2} - \frac{q}{r^4})$ used in the reduction of horizontal force observations. Since the beginning of 1921, the values of this correction have been obtained for a given month by taking the mean for seven months including the given month as fourth of the seven. The fixed value of this correction before 1921 at the distance 22·5 cms. was 9·99283 for the standard instrument. The adopted values for the different months of 1921 were as follows :—

January 9·99260, February 9·99269, March 9·99272, April 9·99269, May 9·99272, June 9·99271, July 9·99275, August 9·99273, September 9·99273, October 9·99275, November 9·99277, December 9·99277.

Base-line values are derived by converting the mean ordinates corresponding to absolute observations with instrument No. 7 in C.G.S. unit (unity = 1 γ) and subtracting the converted ordinates from the mean observed absolute horizontal force. They are further reduced to uniform temperature of 85° F. to make the series comparable from month to month and year to year.

The adopted values are derived by taking overlapping means of 5 successive double sets of observations and reducing them to the proper epoch, values for intermediate days being obtained by simple interpolation.

Horizontal Force Base-Line Values at 85° F., 1921.

Date.		Observed.	Adopted.	Date.		Observed.	Adopted.
		γ	γ			γ	γ
January	5 ..	36 721	36 718	July	6 ..	36 728	36 730
	12	726	721		13 ..	731	728
	19	721	722		20 ..	729	728
	26 ..	723	722		27 ..	722	727
February	2 ..	722	721	August	3 ..	731	725
	9 ..	719	720		10 ..	725	725
	16 ..	723	720		17 ..	721	727
	23 ..	713	719		24 ..	729	727
					31 ..	731	728
March	2 ..	723	721				
	9 ..	719	721	September	7 ..	729	728
	16 ..	725	724		14 ..	729	729
	23 ..	725	726		21 ..	724	729
	30 ..	728	727		28 ..	730	729
April	6 ..	733	728	October	5 ..	732	731
	13 ..	725	731		12 ..	731	733
	20 ..	731	731		19 ..	736	734
	27 ..	737	730		26 ..	737	735
May	4 ..	729	733	November	2 ..	731	735
	11 ..	727	734		9 ..	736	734
	18 ..	741	735		16 ..	731	732
	25 ..	737	737		23 ..	731	731
					30 ..	730	729
June	1 ..	740	739				
	8 ..	737	737	December	7 ..	725	729
	15 ..	742	736		14 ..	727	728
	22 ..	731	734		21 ..	731	727
	29 ..	731	733		28 ..	729	730

Vertical Force.

Dip observations were made almost every day in the year, with the exception of Sundays and holidays, each of the two inductor instruments being observed on alternate days.

Base-line values are derived by converting the mean ordinates corresponding to inclination observation in C.G.S. unit (unity = 1 γ) and subtracting the converted ordinate from the absolute vertical force derived from the inclination observation. Values derived from Inductor No. 108 are reduced to those derived from Inductor No. 41 (which is the Observatory standard) by applying the mean correction for the month deduced from the comparative observations taken once a week.

The adopted values are derived by taking overlapping means of 7 successive observations and reducing them to the proper epoch, values for those days not given by this operation being obtained by interpolation.

Changes of base-line values occurred as follows :—

Date.	Hour.	Amount.	Cause.
		γ	
October 20 ..	16—17	−54	Adjustment of V. F. Magnetograph.
„ 23 ..	9—10	+256	do. do.

Vertical Force Base-Line Values, 1921.

Date.	Observed.	Adopted.	Date.	Observed.	Adopted.
	γ	γ		γ	γ
January 5 ..	16 477	16 482	July 6 ..	16 477	16 466
12 ..	488	485	13 ..	473	468
19 ..	501	480	20 ..	486	481
26 ..	478	472	27 ..	505	490
February 2 ..	494	495	August 3 ..	510	502
9 ..	493	504	10 ..	516	508
16 ..	507	507	17 ..	512	506
21 ..	502	503	24 ..	523	509
			31 ..	493	499
March 2 ..	519	516			
9 ..	540	519	September 7 ..	470	484
16 ..	494	493	14 ..	504	486
23 ..	491	485	21 ..	484	481
30 ..	475	475	28 ..	470	475
April 6 ..	484	478	October 5 ..	483	468
13 ..	456	461	12 ..	468	465
20 ..	452	460	19 ..	470	457
27 ..	485	476	26* ..	650*	654*
May 4 ..	482	463	November 5 ..	641	633
11 ..	423	447	9 ..	617	619
18 ..	115	435	16 ..	618	615
23 ..	418	416	23 ..	625	630
			30 ..	645	641
June 1 ..	423	419			
8 ..	413	416	December 7 ..	638	642
15 ..	416	411	14 ..	634	647
22 ..	465	452	21 ..	685	679
29 ..	467	467	28 ..	651	664

*Adjustment of the magnetograph.

Seismographs.

An Omori-Ewing Seismograph (E-W component) and a locally constructed seismograph (N-S and E-W components) were kept in continuous operation. The earthquakes recorded by the Omori instrument will be found tabulated on page 67.

Magnetic Storms.

In plates I, II, III, IV and V are reproduced disturbed magnetic records for days recommended for publication by the International Commission of Terrestrial Magnetism. The base-line values and scale co-efficients of the original curves are shown against the reproduced curves. The hourly breaks last for 2 to 3 minutes and the time shown against a break is the time for the middle of the break expressed in Greenwich mean time. Increasing ordinates for H. F. and V. F. curves mean increase in force and for the declination curves increase in angle towards the east.

COLABA OBSERVATORY :
The 8th October 1924.

S. K. BANERJI,
Meteorologist, Bombay

Bi-hourly values of barometric pressure (in inches of mercury at 32° F.), 1921.

January.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.
1 ..	29·899	29·881	29·889	29·921	29·967	29·975	29·969	29·843	29·847	29·883	29·931	29·933	29·906
2 ..	·905	·877	·873	·903	·963	·969	·923	·869	·875	·905	·967	·961	·917
3 ..	·936	·912	·916	·938	30·000	·998	·938	·878	·872	·900	·956	·960	·934
4 ..	·947	·921	·915	·943	·001	30·001	·953	·891	·879	·901	·951	·971	·939
5 ..	·948	·936	·930	·962	·016	·036	·970	·908	·904	·926	·970	·989	·957
6 ..	·965	·951	·933	·953	·013	·019	·965	·919	·901	·915	·949	·963	·953
7 ..	·945	·929	·923	·931	29·973	29·989	·935	·891	·889	·919	·945	·961	·936
8 ..	·929	·930	·938	·968	30·006	30·014	·968	·928	·916	·938	·968	·986	**·959**
9 ..	·979	·959	·941	·955	29·991	·003	·951	·895	·883	·889	·915	·917	·939
10 ..	·909	·877	·861	·889	·927	29·941	·891	·847	·827	·847	·869	·897	·881
11 ..	·867	·849	·841	·861	·909	·925	·887	·845	·841	·849	·891	·891	·869
12 ..	·871	·855	·845	·869	·911	·931	·875	·825	·817	·833	·867	·883	**·865**
13 ..	·865	·853	·845	·885	·931	·945	·901	·849	·853	·883	·937	·945	·893
14 ..	·927	·913	·913	·957	30·011	30·005	·957	·889	·877	·905	·929	·941	·935
15 ..	·927	·909	·911	·923	29·973	29·987	·933	·877	·867	·903	·937	·947	·925
16 ..	·930	·912	·904	·934	·976	·988	·924	·866	·848	·886	·908	·918	·913
17 ..	·907	·885	·897	·927	·971	·981	·935	·889	·881	·907	·953	·957	·925
18 ..	·940	·912	·906	·934	·974	·968	·930	·870	·850	·868	·906	·908	·913
19 ..	·883	·863	·845	·873	·923	·949	·909	·847	·833	·843	·907	·901	·882
20 ..	·875	·861	·847	·871	·913	30·033	·901	·851	·845	·861	·891	·915	·884
21 ..	·900	·886	·880	·902	·956	29·988	·956	·902	·894	·908	·938	·952	·922
22 ..	·940	·930	·920	·946	·988	30·006	·966	·916	·904	·914	·946	·962	·944
23 ..	·956	·948	·936	·958	30·000	·020	·962	·892	·862	·882	·912	·926	·938
24 ..	·906	·898	·874	·914	29·956	29·972	·926	·868	·848	·870	·898	·912	·903
25 ..	·899	·891	·893	·941	·993	30·017	·987	·925	·905	·923	·955	·967	·942
26 ..	·951	·921	·917	·945	·983	·011	·969	·913	·901	·921	·945	·949	·942
27 ..	·923	·893	·873	·899	·943	29·975	·933	·887	·883	·913	·955	·969	·921
28 ..	·937	·923	·919	·947	·989	30·013	·971	·917	·901	·923	·951	·963	·946
29 ..	·940	·910	·894	·926	·966	29·980	·936	·876	·870	·890	·908	·922	·917
30 ..	·902	·882	·874	·906	·950	·968	·908	·846	·836	·852	·882	·900	·891
31 ..	·880	·862	·852	·878	·938	·952	·912	·858	·836	·844	·872	·874	·879
Mean ..	29·920	29·901	29·894	29·921	29·968	29·986	29·935	29·880	29·869	29·890	29·926	29·936	29·918

Inches.
The highest tabulated value during the month = 30·036
The lowest „ „ „ „ = 29·807

February.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean
1 ..	29·856	29·836	29·838	29·864	29·920	29·942	29·894	29·842	29·828	29·844	29·876	29·904	29·871
2 ..	·890	·870	·858	·892	·952	·964	·904	·846	·838	·850	·880	·904	·888
3 ..	·893	·871	·859	·891	·935	·963	·919	·871	·863	·889	·933	·957	·905
4 ..	·939	·917	·911	·957	30·007	30·027	·977	·923	·907	·919	·955	·957	**·950**
5 ..	·932	·904	·890	·918	29·964	29·978	·940	·890	·866	·878	·914	·924	·916
6 ..	·912	·888	·870	·878	·924	·942	·894	·844	·834	·838	·884	·900	·883
7 ..	·895	·881	·867	·881	·929	·959	·931	·883	·869	·905	·941	·957	·910
8 ..	·928	·906	·898	·914	·968	·992	·946	·878	·854	·870	·906	·924	·916
9 ..	·917	·895	·881	·891	·927	·953	·921	·873	·845	·851	·875	·893	·893
10 ..	·865	·835	·829	·855	·885	·891	·845	·771	·757	·775	·821	·837	·829
11 ..	·812	·772	·766	·788	·842	·876	·844	·798	·790	·814	·866	·884	**·821**
12 ..	·859	·833	·835	·867	·927	·955	·929	·881	·865	·883	·921	·937	·892
13 ..	·918	·894	·888	·910	·958	·996	·960	·888	·864	·888	·924	·940	·920
14 ..	·923	·895	·905	·943	·987	30·011	·959	·881	·829	·847	·893	·903	·915
15 ..	·886	·850	·836	·868	·916	29·924	·884	·822	·810	·838	·866	·882	·865
16 ..	·861	·843	·847	·889	·941	·955	·897	·845	·835	·861	·917	·929	·887
17 ..	·910	·886	·884	·914	·966	30·000	·948	·874	·852	·874	·916	·932	·914
18 ..	·910	·868	·862	·896	·958	29·974	·922	·844	·816	·844	·894	·910	·892
19 ..	·890	·844	·828	·852	·902	·922	·880	·822	·804	·820	·856	·866	·856
20 ..	·842	·830	·824	·866	·920	·944	·900	·842	·824	·844	·892	·910	·871
21 ..	·894	·868	·874	·902	·948	·966	·926	·870	·850	·874	·904	·904	·898
22 ..	·883	·835	·823	·851	·893	·919	·869	·817	·813	·837	·881	·913	·861
23 ..	·890	·864	·856	·890	·940	·954	·908	·848	·828	·844	·894	·914	·887
24 ..	·905	·883	·873	·903	·945	·965	·927	·871	·843	·873	·923	·945	·906
25 ..	·929	·903	·893	·919	·961	·971	·933	·881	·851	·875	·929	·937	·915
26 ..	·911	·871	·869	·891	·929	·949	·897	·845	·823	·841	·883	·883	·882
27 ..	·875	·845	·831	·843	·893	·909	·875	·809	·783	·803	·853	·891	·851
28 ..	·867	·835	·837	·863	·911	·943	·911	·857	·843	·863	·899	·913	·886
Mean ..	29·893	29·865	29·858	29·886	29·934	29·955	29·912	29·854	29·835	29·855	29·897	29·912	29·88

Inches.
The highest tabulated value during the month = 30·031
The lowest „ „ „ „ = 29·755

The daily means are derived from 24 hourly values.

Bi-hourly values of barometric pressure (in inches of mercury at 32° F.), 1921.

March.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.
1 ..	29·899	29·871	29·867	29·893	29·945	29·959	29·913	29·847	29·817	29·843	29·859	29·875	29·883
2 ..	·853	·803	·793	·815	·873	·895	·839	·783	·755	·761	·797	·813	·814
3 ..	·780	·762	·748	·790	·838	·854	·784	·708	·678	·694	·736	·758	·759
4 ..	·745	·709	·707	·747	·801	·817	·755	·691	·669	·695	·747	·769	·738
5 ..	·756	·740	·750	·788	·862	·872	·828	·770	·760	·794	·832	·858	·803
6 ..	·841	·813	·821	·859	·923	·951	·923	·863	·849	·885	·923	·931	·883
7 ..	·898	·870	·878	·890	·924	·932	·890	·818	·772	·784	·810	·830	·857
8 ..	·808	·748	·736	·764	·798	·808	·752	·694	·664	·674	·710	·728	·737
9 ..	·704	·684	·680	·720	·762	·784	·764	·718	·712	·746	·790	·828	·744
10 ..	·809	·783	·781	·809	·861	·885	·853	·813	·795	·823	·867	·881	·832
11 ..	·870	·840	·830	·864	·904	·908	·870	·800	·772	·780	·832	·854	·844
12 ..	·848	·810	·812	·852	·896	·912	·868	·806	·776	·792	·830	·850	·838
13 ..	·844	·820	·834	·872	·914	·932	·888	·824	·796	·820	·854	·860	·856
14 ..	·845	·821	·821	·875	·903	·923	·873	·815	·787	·805	·827	·842	·845
15 ..	·829	·805	·803	·847	·889	·903	·869	·825	·813	·841	·885	·889	·852
16 ..	·889	·875	·881	·893	·929	·921	·873	·815	·799	·811	·839	·851	·865
17 ..	·844	·816	·818	·840	·894	·914	·868	·788	·752	·776	·804	·802	·825
18 ..	·785	·757	·757	·791	·839	·855	·815	·747	·719	·747	·789	·810	·784
19 ..	·789	·769	·779	·799	·863	·881	·839	·777	·757	·789	·829	·841	·810
20 ..	·828	·798	·804	·850	·894	·900	·856	·806	·790	·816	·854	·874	·840
21 ..	·858	·826	·826	·858	·904	·918	·864	·796	·778	·786	·818	·852	·840
22 ..	·829	·793	·787	·821	·877	·901	·867	·827	·817	·833	·881	·895	·845
23 ..	·874	·844	·834	·854	·924	·944	·910	·864	·850	·870	·900	·912	·883
24 ..	·902	·860	·846	·876	·912	·916	·876	·810	·796	·810	·844	·872	·859
25 ..	·868	·828	·812	·834	·874	·882	·854	·794	·758	·766	·802	·822	·824
26 ..	·808	·768	·752	·790	·830	·834	·800	·734	·702	·714	·764	·784	·773
27 ..	·774	·750	·756	·780	·844	·860	·832	·780	·768	·790	·824	·846	·802
28 ..	·823	·777	·761	·809	·853	·867	·825	·769	·741	·745	·789	·807	·797
29 ..	·789	·763	·779	·810	·857	·869	·839	·789	·781	·797	·837	·843	·815
30 ..	·827	·801	·807	·843	·887	·893	·863	·815	·797	·803	·839	·863	·838
31 ..	·844	·804	·804	·846	·900	·904	·856	·790	·770	·778	·816	·834	·829
Mean ..	29·828	29·797	29·796	29·828	29·877	29·890	29·849	29·790	29·767	29·786	29·823	29·841	29·823

April.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.
1 ..	29·816	29·794	29·802	29·820	29·856	29·866	29·820	29·776	29·758	29·776	29·830	29·852	29·815
2 ..	·825	·797	·797	·827	·859	·867	·815	·757	·729	·765	·811	·825	·806
3 ..	·819	·801	·809	·839	·883	·877	·851	·781	·759	·783	·835	·829	·823
4 ..	·809	·799	·803	·831	·867	·867	·829	·765	·745	·771	·797	·829	·810
5 ..	·806	·796	·766	·784	·824	·840	·812	·750	·720	·738	·758	·774	·779
6 ..	·741	·701	·673	·695	·751	·727	·743	·697	·671	·695	·729	·733	·718
7 ..	·725	·713	·737	·771	·811	·839	·813	·763	·739	·769	·839	·871	·786
8 ..	·827	·793	·827	·857	·907	·889	·851	·781	·751	·771	·801	·815	·822
9 ..	·796	·766	·758	·776	·820	·824	·788	·726	·712	·740	·774	·788	·774
10 ..	·780	·760	·754	·770	·808	·826	·804	·744	·718	·740	·786	·820	·778
11 ..	·802	·810	·800	·822	·884	·890	·862	·810	·770	·796	·846	·870	·833
12 ..	·854	·840	·844	·864	·918	·940	·918	·850	·814	·828	·862	·902	·871
13 ..	·876	·846	·856	·862	·898	·888	·872	·810	·778	·786	·816	·832	·842
14 ..	·812	·792	·798	·828	·876	·894	·860	·792	·758	·774	·814	·832	·820
15 ..	·852	·844	·848	·882	·932	·938	·896	·834	·810	·834	·878	·876	·870
16 ..	·861	·839	·843	·883	·929	·925	·897	·825	·781	·795	·831	·843	·854
17 ..	·809	·787	·791	·815	·857	·863	·833	·775	·742	·762	·793	·821	·805
18 ..	·811	·793	·811	·843	·875	·883	·861	·805	·781	·807	·855	·879	·835
19 ..	·846	·822	·828	·869	·918	·932	·904	·830	·806	·814	·854	·874	·860
20 ..	·855	·821	·815	·843	·873	·875	·851	·795	·753	·763	·789	·811	·820
21 ..	·781	·735	·729	·767	·801	·809	·783	·733	·701	·717	·745	·777	·757
22 ..	·767	·737	·743	·767	·807	·825	·823	·767	·741	·755	·793	·811	·779
23 ..	·795	·761	·761	·789	·841	·863	·841	·787	·761	·779	·825	·847	·806
24 ..	·839	·811	·825	·861	·891	·895	·863	·797	·769	·773	·817	·835	·831
25 ..	·810	·780	·776	·796	·836	·836	·810	·744	·708	·726	·762	·780	·780
26 ..	·765	·775	·781	·803	·839	·845	·809	·737	·713	·729	·759	·775	·778
27 ..	·744	·720	·730	·752	·792	·810	·784	·734	·712	·748	·780	·780	·758
28 ..	·765	·729	·735	·767	·811	·813	·785	·731	·699	·727	·753	·759	·756
29 ..	·742	·708	·716	·752	·792	·784	·750	·698	·688	·702	·734	·750	·739
30 ..	·726	·716	·738	·768	·810	·806	·772	·712	·668	·676	·712	·750	·738
Mean ..	29·802	29·779	29·783	29·810	29·852	29·860	29·830	29·770	29·742	29·761	29·799	29·818	29·801

Inches.

The highest tabulated value during the month = 29·963
The lowest " " " " = 29·664

Inches.

The highest tabulated value during the month = 29·948
The lowest " " " " = 29·666

The daily means are derived from 24 hourly values.

Bi-hourly values of barometric pressure (in inches of mercury at 32° F.), 1921.

May.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.
1 ..	29·752	29·750	29·762	29·784	29·838	29·842	29·808	29·752	29·728	29·762	29·782	29·814	29·782
2 ..	·793	·777	·767	·797	·837	·843	·805	·747	·719	·725	·753	·769	·778
3 ..	·745	·719	·719	·739	·789	·801	·773	·729	·711	·725	·762	·771	·750
4 ..	·736	·702	·712	·739	·784	·792	·776	·742	·722	·716	·772	·782	·750
5 ..	·754	·714	·720	·762	·806	·818	·784	·728	·689	·698	·716	·724	·741
6 ..	·694	·644	·654	·692	·734	·750	·728	·704	·670	·688	·720	·738	·701
7 ..	·713	·689	·695	·727	·773	·803	·777	·735	·715	·723	·753	·767	·740
8 ..	·726	·708	·704	·724	·758	·764	·748	·698	·666	·680	·704	·704	·716
9 ..	·696	·664	·662	·686	·734	·740	·720	·682	·654	·670	·700	·730	·695
10 ..	·711	·681	·679	·715	·747	·763	·737	·711	·689	·707	·749	·777	·724
11 ..	·753	·733	·729	·739	·777	·777	·759	·721	·703	·705	·735	·737	·739
12 ..	·718	·694	·684	·710	·716	·702	·684	·650	·624	·632	·670	·682	·679
13 ..	·663	·629	·635	·671	·703	·705	·679	·627	·599	·619	·651	·687	**·655**
14 ..	·673	·653	·657	·709	·753	·777	·751	·707	·681	·695	·727	·737	·711
15 ..	·715	·693	·705	·751	·791	·803	·781	·733	·711	·729	·753	·767	·745
16 ..	·736	·718	·716	·744	·786	·810	·774	·718	·692	·706	·736	·748	·741
17 ..	·717	·693	·699	·739	·787	·795	·759	·717	·699	·719	·743	·759	·736
18 ..	·741	·725	·721	·753	·803	·815	·797	·757	·737	·753	·777	·793	·764
19 ..	·770	·738	·744	·784	·824	·838	·806	·768	·748	·766	·804	·814	·784
20 ..	·777	·745	·741	·777	·827	·843	·821	·781	·749	·759	·785	·805	·785
21 ..	·766	·736	·738	·768	·812	·828	·790	·744	·712	·726	·764	·775	·763
22 ..	·750	·738	·744	·776	·810	·812	·794	·762	·736	·750	·776	·788	·769
23 ..	·757	·729	·731	·759	·785	·781	·763	·719	·701	·725	·761	·779	·749
24 ..	·753	·733	·731	·763	·793	·796	·773	·733	·709	·727	·757	·785	·755
25 ..	·766	·738	·746	·786	·810	·819	·806	·776	·752	·766	·792	·812	·782
26 ..	·798	·768	·768	·798	·828	·838	·812	·770	·738	·756	·784	·792	**·787**
27 ..	·766	·732	·742	·762	·778	·794	·774	·732	·706	·710	·736	·762	·749
28 ..	·745	·725	·725	·747	·777	·779	·753	·717	·691	·703	·733	·753	·736
29 ..	·724	·698	·702	·734	·776	·782	·744	·696	·664	·674	·714	·736	·720
30 ..	·714	·690	·694	·718	·764	·763	·738	·708	·680	·690	·730	·750	·719
31 ..	·725	·709	·709	·737	·767	·767	·737	·703	·685	·697	·723	·741	·725
Mean ..	29·737	29·712	29·714	29·745	29·783	29·792	29·766	29·725	29·699	29·713	29·744	29·761	29·741

Inches.
The highest tabulated value during the month = 29·853
The lowest " " " " = 29·599

June.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.
1 ..	29·709	29·685	29·691	29·715	29·741	29·743	29·723	29·685	29·665	29·679	29·701	29·731	29·705
2 ..	·705	·669	·671	·697	·727	·739	·719	·687	·657	·669	·707	·741	·700
3 ..	·721	·683	·671	·707	·745	·771	·747	·705	·669	·681	·731	·747	·713
4 ..	·715	·687	·689	·717	·759	·763	·741	·705	·671	·669	·721	·747	·715
5 ..	·717	·695	·687	·705	·737	·749	·729	·691	·653	·661	·699	·725	·704
6 ..	·711	·681	·681	·705	·739	·751	·731	·693	·649	·667	·693	·727	·703
7 ..	·710	·682	·676	·696	·724	·736	·706	·668	·614	·636	·652	·680	·682
8 ..	·644	·624	·630	·651	·682	·690	·666	·606	·570	·588	·642	·658	·638
9 ..	·634	·604	·600	·610	·634	·650	·636	·597	·554	·582	·618	·616	·610
10 ..	·611	·587	·585	·611	·641	·633	·601	·583	·579	·585	·601	·627	·604
11 ..	·621	·579	·593	·611	·647	·657	·633	·623	·593	·603	·637	·653	·621
12 ..	·642	·618	·614	·630	·674	·686	·660	·612	·588	·598	·622	·636	·633
13 ..	·623	·581	·595	·633	·665	·675	·659	·619	·585	·593	·631	·651	·626
14 ..	·641	·605	·601	·627	·667	·671	·645	·617	·607	·601	·657	·667	·635
15 ..	·629	·613	·601	·623	·627	·643	·619	·597	·579	·583	·641	·667	·618
16 ..	·616	·594	·592	·634	·652	·666	·634	·602	·576	·592	·612	·646	·619
17 ..	·622	·588	·582	·604	·630	·634	·616	·600	·558	·554	·578	·592	·594
18 ..	·564	·528	·520	·544	·576	·574	·546	·528	·486	·492	·528	·544	·532
19 ..	·520	·472	·474	·496	·534	·544	·512	·544	·506	·516	·542	·560	**·517**
20 ..	·541	·509	·511	·557	·587	·643	·565	·585	·552	·553	·577	·601	·568
21 ..	·574	·538	·548	·589	·600	·612	·607	·587	·564	·570	·591	·596	·580
22 ..	·584	·572	·568	·576	·616	·624	·616	·589	·573	·577	·600	·623	·592
23 ..	·613	·595	·597	·617	·676	·687	·679	·643	·617	·631	·651	·682	·642
24 ..	·675	·649	·646	·663	·690	·708	·702	·663	·662	·674	·706	·714	·679
25 ..	·706	·678	·678	·699	·717	·739	·730	·705	·678	·694	·716	·748	·707
26 ..	·736	·716	·712	·734	·757	·760	·736	·706	·683	·683	·703	·716	·720
27 ..	·711	·694	·696	·725	·766	·768	·760	·722	·709	·704	·722	·734	·727
28 ..	·742	·716	·708	·720	·764	·772	·756	·724	·720	·738	·752	·768	·742
29 ..	·770	·728	·716	·741	·778	·786	·768	·732	·716	·726	·752	·766	**·748**
30 ..	·750	·720	·726	·755	·778	·772	·748	·710	·680	·686	·708	·714	·727
Mean ..	29·658	29·630	29·629	29·653	29·684	29·695	29·673	29·644	29·617	29·626	29·656	29·676	29·653

Inches.
The highest tabulated value during the month = 29·788
The lowest " " " " = 29·472

The daily means are derived from 24 hourly values.

Bi-hourly values of barometric pressure (in inches of mercury at 32° F.), 1921.

July.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.
1 ..	29·685	29·637	29·625	29·653	29·685	29·695	29·661	29·637	29·619	29·613	29·645	29·655	29·650
2 ..	·631	·591	·587	·617	·651	·675	·655	·639	·611	·621	·659	·665	·634
3 ..	·656	·628	·624	·646	·668	·686	·682	·658	·638	·648	·672	·684	·657
4 ..	·673	·641	·643	·665	·693	·689	·683	·657	·633	·647	·673	·689	·665
5 ..	·674	·654	·650	·668	·700	·700	·686	·664	·634	·650	·680	·700	·673
6 ..	·688	·650	·638	·654	·678	·674	·660	·616	·592	·606	·624	·668	·646
7 ..	·650	·610	·604	·620	·654	·692	·682	·656	·660	·678	·696	·700	·658
8 ..	·678	·646	·644	·668	·706	·728	·716	·684	·670	·672	·692	·694	·683
9 ..	·666	·648	·646	·662	·686	·682	·664	·642	·628	·634	·654	·668	·657
10 ..	·652	·618	·602	·624	·648	·646	·632	·612	·602	·612	·636	·648	·629
11 ..	·647	·617	·621	·647	·669	·683	·671	·651	·621	·633	·667	·693	·653
12 ..	·686	·672	·666	·674	·698	·716	·710	·672	·640	·668	·684	·712	·684
13 ..	·714	·672	·652	·664	·700	·722	·702	·652	·614	·620	·654	·676	·669
14 ..	·664	·626	·608	·632	·622	·614	·604	·550	·502	·512	·558	·572	·586
15 ..	·551	·515	·509	·531	·553	·575	·583	·543	·533	·583	·629	·675	·567
16 ..	·669	·627	·639	·679	·711	·727	·723	·713	·691	·713	·767	·811	·708
17 ..	·778	·756	·738	·756	·776	·788	·782	·746	·706	·722	·766	·794	·759
18 ..	·759	·729	·715	·737	·775	·785	·761	·717	·695	·719	·751	·783	·744
19 ..	·730	·718	·700	·730	·774	·784	·780	·734	·722	·738	·774	·790	·750
20 ..	·766	·730	·740	·738	·776	·786	·768	·738	·706	·712	·744	·750	·745
21 ..	·739	·687	·661	·671	·701	·727	·699	·669	·638	·641	·665	·685	·681
22 ..	·664	·624	·596	·606	·640	·656	·648	·604	·566	·556	·580	·580	·608
23 ..	·561	·533	·537	·539	·567	·553	·527	·497	·465	·473	·487	·503	·517
24 ..	·491	·473	·469	·487	·517	·527	·545	·529	·511	·521	·553	·577	·519
25 ..	·575	·565	·559	·577	·599	·595	·585	·569	·547	·565	·591	·625	·580
26 ..	·622	·596	·588	·594	·628	·638	·624	·588	·556	·566	·602	·610	·600
27 ..	·593	·567	·545	·567	·599	·607	·599	·565	·547	·557	·577	·589	·575
28 ..	·572	·530	·522	·526	·554	·566	·556	·520	·504	·514	·554	·584	·543
29 ..	·560	·526	·524	·568	·590	·606	·582	·564	·554	·544	·568	·596	·566
30 ..	·588	·558	·544	·560	·590	·588	·560	·536	·506	·526	·564	·584	·558
31 ..	·561	·541	·533	·561	·605	·629	·621	·595	·581	·609	·663	·695	·603
Mean ..	29·650	29·619	29·611	29·630	29·658	29·669	29·656	29·629	29·603	29·615	29·646	29·666	29·638

Inches.

The highest tabulated value during the month = 29·811

The lowest " " " " = 29·453

August

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.
1 ..	29·686	29·658	29·668	29·688	29·734	29·756	29·748	29·720	29·694	29·714	29·738	29·764	29·716
2 ..	·748	·716	·702	·716	·738	·758	·750	·718	·692	·700	·732	·760	·728
3 ..	·737	·701	·691	·719	·755	·763	·759	·723	·695	·709	·743	·767	·730
4 ..	·748	·710	·710	·736	·762	·774	·750	·720	·694	·712	·748	·764	·734
5 ..	·729	·701	·697	·709	·743	·739	·733	·705	·691	·709	·739	·759	·721
6 ..	·735	·705	·689	·697	·729	·741	·737	·711	·681	·677	·725	·725	·711
7 ..	·687	·655	·645	·665	·687	·695	·679	·639	·609	·603	·631	·641	·651
8 ..	·607	·583	·581	·591	·713	·633	·623	·597	·573	·579	·609	·635	·607
9 ..	·604	·582	·582	·615	·656	·670	·664	·626	·594	·620	·664	·680	·632
10 ..	·659	·623	·611	·635	·665	·681	·661	·633	·613	·625	·677	·695	·649
11 ..	·679	·649	·645	·674	·725	·737	·719	·671	·663	·677	·689	·717	·687
12 ..	·698	·638	·634	·650	·680	·686	·672	·644	·628	·646	·684	·706	·665
13 ..	·681	·639	·639	·661	·699	·717	·705	·671	·663	·691	·719	·733	·682
14 ..	·711	·687	·683	·711	·747	·755	·729	·693	·683	·691	·729	·745	·714
15 ..	·728	·696	·686	·712	·748	·758	·742	·708	·684	·704	·728	·752	·721
16 ..	·724	·676	·678	·694	·722	·740	·720	·686	·664	·674	·698	·702	·697
17 ..	·679	·639	·635	·663	·703	·717	·701	·667	·639	·665	·695	·693	·675
18 ..	·674	·644	·640	·660	·692	·710	·688	·656	·632	·654	·688	·720	·671
19 ..	·692	·655	·637	·661	·697	·707	·683	·643	·623	·637	·677	·689	·665
20 ..	·668	·634	·624	·636	·666	·682	·668	·634	·618	·622	·660	·666	·647
21 ..	·645	·619	·627	·651	·682	·699	·677	·641	·611	·641	·677	·707	·658
22 ..	·698	·660	·658	·678	·716	·722	·694	·660	·646	·676	·710	·728	·688
23 ..	·709	·677	·671	·701	·733	·735	·715	·671	·641	·653	·681	·689	·689
24 ..	·682	·648	·640	·666	·714	·728	·720	·686	·660	·692	·712	·724	·691
25 ..	·708	·678	·678	·696	·732	·742	·722	·694	·676	·692	·716	·722	·706
26 ..	·712	·692	·690	·726	·770	·778	·756	·732	·722	·728	·770	·790	·740
27 ..	·774	·744	·734	·780	·818	·818	·800	·770	·766	·772	·794	·818	·782
28 ..	·782	·748	·744	·774	·808	·822	·792	·752	·726	·742	·770	·784	·771
29 ..	·769	·739	·731	·751	·787	·803	·779	·745	·727	·739	·763	·791	·760
30 ..	·776	·754	·754	·768	·798	·814	·786	·742	·720	·734	·758	·760	·761
31 ..	·734	·708	·700	·712	·746	·760	·728	·684	·658	·662	·686	·704	·706
Mean ..	29·705	29·673	29·668	29·690	29·728	29·737	29·719	29·685	29·664	29·679	29·710	29·727	29·699

Inches.

The highest tabulated value during the month = 29·822

The lowest " " " " = 29·567

The daily means are derived from 24 hourly values

Bi-hourly values of barometric pressure (in inches of mercury at 32° F.), 1921.

September.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.
1 ..	29·675	29·635	29·619	29·633	29·673	29·685	29·675	29·635	29·613	29·627	29·655	29·671	29·651
2 ..	·649	·621	·609	·637	·673	·697	·675	·637	·611	·625	·663	·681	·649
3 ..	·656	·630	·616	·634	·682	·704	·684	·644	·628	·646	·674	·690	·658
4 ..	·674	·640	·624	·626	·670	·684	·664	·620	·612	·628	·656	·672	**·648**
5 ..	·645	·620	·618	·628	·676	·686	·670	·644	·628	·630	·660	·686	·650
6 ..	·672	·638	·638	·658	·690	·704	·678	·654	·632	·666	·694	·720	·672
7 ..	·696	·674	·664	·694	·632	·754	·734	·688	·680	·698	·738	·770	·707
8 ..	·746	·720	·716	·746	·798	·808	·782	·748	·734	·738	·774	·806	·761
9 ..	·788	·762	·748	·786	·828	·848	·824	·788	·768	·790	·836	·854	·805
10 ..	·843	·825	·819	·853	·895	·915	·887	·843	·815	·825	·861	·881	·856
11 ..	·862	·828	·830	·846	·892	·906	·884	·834	·818	·822	·848	·866	·853
12 ..	·835	·805	·795	·813	·861	·877	·857	·815	·799	·813	·847	·867	·832
13 ..	·827	·792	·793	·805	·845	·861	·843	·789	·767	·785	·817	·823	·812
14 ..	·803	·767	·761	·779	·813	·831	·799	·763	·751	·761	·801	·817	·787
15 ..	·792	·754	·746	·768	·808	·818	·800	·770	·754	·770	·812	·814	·785
16 ..	·793	·771	·763	·787	·837	·851	·825	·783	·769	·781	·827	·827	·803
17 ..	·815	·783	·765	·791	·825	·833	·801	·729	·695	·724	·747	·773	·774
18 ..	·734	·696	·672	·696	·720	·746	·716	·680	·666	·708	·748	·766	·712
19 ..	·748	·722	·710	·732	·774	·778	·750	·710	·690	·716	·744	·762	·737
20 ..	·747	·725	·721	·745	·785	·809	·783	·753	·739	·755	·779	·799	·763
21 ..	·786	·762	·756	·780	·816	·832	·814	·790	·796	·802	·830	·852	·802
22 ..	·828	·794	·788	·804	·832	·836	·810	·766	·754	·776	·818	·840	·803
23 ..	·813	·789	·793	·815	·847	·859	·835	·779	·777	·803	·835	·855	·817
24 ..	·839	·807	·795	·837	·875	·883	·843	·793	·775	·797	·831	·835	·826
25 ..	·823	·791	·787	·817	·865	·875	·833	·791	·789	·817	·857	·871	·827
26 ..	·855	·827	·823	·857	·903	·913	·875	·829	·823	·851	·883	·889	·861
27 ..	·867	·841	·843	·877	·915	·927	·891	·849	·833	·853	·881	·887	·871
29 ..	·855	·827	·833	·863	·901	·915	·893	·843	·835	·851	·889	·901	·867
28 ..	·867	·835	·833	·871	·907	·927	·879	·829	·847	·827	·883	·911	·868
30 ..	·895	·877	·875	·905	·939	·933	·885	·835	·819	·853	·881	·895	**·881**
Mean ..	29·781	29·752	29·745	29·769	29·806	29·823	29·796	29·754	29·740	29·759	29·792	29·809	29·778

Inches.
The highest tabulated value during the month = 29·941
The lowest " " = 29·607

October.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.
1 ..	29·861	29·817	29·829	29·863	29·899	29·907	29·869	29·807	29·789	29·813	29·847	29·857	29·846
2 ..	·832	·816	·810	·838	·880	·892	·848	·804	·786	·810	·838	·842	·833
3 ..	·821	·787	·783	·811	·853	·859	·823	·777	·761	·773	·809	·819	·805
4 ..	·788	·778	·768	·796	·834	·842	·796	·734	·724	·756	·806	·814	·786
5 ..	·792	·774	·782	·800	·834	·834	·804	·752	·760	·792	·848	·872	·806
6 ..	·847	·801	·799	·843	·875	·879	·825	·763	·743	·771	·817	·841	·816
7 ..	·822	·792	·800	·826	·852	·852	·802	·748	·726	·754	·802	·818	·799
8 ..	·790	·764	·778	·800	·832	·836	·780	·722	·708	·720	·760	·774	·771
9 ..	·759	·731	·735	·769	·803	·797	·733	·660	·669	·689	·737	·739	·735
10 ..	·722	·676	·666	·690	·754	·766	·736	·668	·666	·704	·762	·774	**·716**
11 ..	·761	·739	·743	·763	·807	·825	·779	·719	·725	·777	·803	·829	·775
12 ..	·815	·787	·793	·829	·875	·897	·861	·815	·811	·839	·879	·905	·843
13 ..	·882	·862	·870	·906	·956	·962	·918	·864	·856	·886	·934	·940	·905
14 ..	·929	·909	·899	·941	·969	·961	·901	·843	·835	·863	·889	·895	·903
15 ..	·886	·862	·856	·888	·920	·924	·864	·818	·800	·826	·870	·872	·865
16 ..	·857	·821	·823	·865	·911	·921	·881	·829	·837	·869	·889	·919	·871
17 ..	·900	·890	·896	·942	·976	·988	·932	·890	·884	·910	·940	·946	·925
18 ..	·917	·897	·895	·943	·991	·993	·939	·893	·889	·915	·957	·963	·933
19 ..	·936	·918	·920	·950	·988	·986	·938	·892	·876	·906	·950	·964	**·936**
20 ..	·932	·914	·906	·928	·966	·970	·920	·872	·862	·882	·916	·914	·914
21 ..	·891	·859	·871	·899	·939	·943	·897	·851	·845	·867	·902	·903	·889
22 ..	·888	·878	·880	·922	·962	·969	·918	·882	·874	·916	·946	·952	·914
23 ..	·934	·938	·930	·954	·992	30·004	·954	·900	·886	·896	·928	·926	·936
24 ..	·896	·872	·868	·906	·942	29·952	·900	·842	·828	·850	·888	·894	·885
25 ..	·854	·822	·818	·842	·880	·878	·838	·786	·772	·794	·828	·832	·827
26 ..	·807	·795	·795	·837	·869	·873	·825	·779	·747	·813	·862	·863	**·827**
27 ..	·851	·839	·851	·883	·925	·929	·883	·823	·821	·845	·875	·885	·869
28 ..	·866	·856	·862	·914	·952	·956	·882	·814	·804	·824	·866	·872	·872
29 ..	·850	·836	·836	·868	·896	·904	·848	·780	·772	·800	·838	·842	·839
30 ..	·826	·806	·810	·846	·879	·897	·854	·800	·788	·816	·865	·874	·838
31 ..	·857	·833	·833	·874	·921	·917	·861	·815	·811	·839	·871	·877	·859
Mean ..	29·851	29·828	29·829	29·862	29·901	29·907	29·858	29·805	29·796	29·823	29·862	29·872	29·850

Inches.
The highest tabulated value during the month = 30·098
The lowest " " " = 29·657

The daily means are derived from 24 hourly values.

Bi-hourly values of barometric pressure (in inches of mercury at 32° F.), 1921.

November.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.
1	29·851	29·827	29·827	29·863	29·903	29·907	29·859	29·811	29·804	29·833	29·882	29·883	29·858
2	·844	·838	·840	·874	·894	·910	·866	·822	·834	·866	·896	·906	·867
3	·877	·865	·867	·903	·945	·947	·917	·888	·880	·929	·965	·957	·913
4	·943	·921	·921	·955	30·001	·993	·949	·911	·909	·935	·967	·977	·945
5	·963	·931	·923	·951	29·981	·973	·923	·869	·859	·883	·913	·920	·923
6	·891	·875	·865	·905	·931	·921	·859	·815	·807	·829	·866	·859	·868
7	·847	·838	·842	·877	·917	·917	·871	·823	·823	·845	·887	·891	·865
8	·872	·856	·857	·899	·937	·939	·905	·859	·855	·889	·923	·941	·896
9	·925	·921	·931	·973	30·001	30·003	·950	·891	·887	·913	·957	·975	·946
10	·961	·947	·955	30·001	·049	·049	·985	·941	·931	·977	30·027	30·023	·989
11	30·003	·996	·996	·030	·080	·080	30·020	·961	·944	·974	·006	·007	30·007
12	29·983	·961	·973	·005	·055	·071	·004	·937	·917	·953	29·997	29·995	29·988
13	·970	·928	·929	29·971	·017	·033	29·977	·925	·915	·943	·984	·997	·966
14	·968	·949	·953	·982	·020	·042	·988	·924	·914	·940	·984	·996	·972
15	·974	·952	·944	·981	·024	·039	·981	·916	·910	·938	·982	·995	·969
16	·953	·925	·931	·960	·009	·019	·967	·903	·891	·907	·951	·955	·947
17	·927	·903	·909	·929	29·965	29·977	·935	·875	·867	·893	·945	·967	·924
18	·935	·913	·907	·927	·967	·984	·939	·871	·847	·880	·915	·931	·917
19	·905	·883	·882	·911	·949	·955	·907	·863	·844	·866	·903	·921	·899
20	·903	·871	·861	·891	·949	·956	·903	·869	·871	·909	·943	·963	·908
21	·945	·927	·935	·963	30·005	30·005	·955	·909	·905	·941	·973	·987	·955
22	·970	·948	·953	·982	·028	·042	·988	·932	·932	·968	30·002	30·029	·981
23	·989	·972	·957	·989	·034	·036	·978	·933	·929	·964	29·998	29·998	·981
24	·972	·938	·930	·962	·010	·018	·974	·934	·933	·972	·994	·994	·968
25	·968	·956	·960	·992	·043	·050	30·006	·962	·944	·966	30·036	30·005	·988
26	·976	·950	·945	·970	·004	·012	29·964	·914	·912	·934	29·976	29·992	·962
27	·970	·940	·936	·958	·004	·000	·951	·910	·896	·916	·964	·972	·951
28	·948	·917	·905	·933	29·991	·007	·971	·927	·909	·943	·987	30·009	·954
29	·992	·968	·965	·994	30·040	·054	30·006	·954	·952	·976	30·000	·006	·993
30	·982	·958	·950	·976	·022	·032	29·992	·946	·940	·961	·012	·082	·984
Mean	29·940	29·919	29·918	29·950	29·992	29·999	29·950	29·900	29·892	29·921	29·960	29·969	29·943

December.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.
1	30·012	29·988	29·978	30·008	30·048	30·034	29·972	29·912	29·902	29·922	29·962	29·908	29·974
2	29·952	·939	·924	29·954	29·997	·008	·956	·896	·890	·906	·938	·955	·942
3	·937	·925	·919	·937	·988	·005	·953	·908	·897	·921	·979	·996	·948
4	·977	·953	·949	·971	30·005	·035	30·011	·965	·955	·973	·995	30·015	·984
5	·994	·980	·978	30·016	·059	·061	·022	·972	·952	·884	30·028	·034	30·003
6	30·006	·983	·974	·002	·042	·042	29·996	·952	·934	·962	·002	·000	29·991
7	29·977	·947	·931	29·965	·013	·021	·969	·913	·969	·935	29·971	29·977	·962
8	·951	·932	·926	·964	·012	·017	·960	·920	·906	·926	·962	·970	·954
9	·960	·944	·938	·956	·004	·000	·956	·910	·896	·922	·958	·980	·952
10	·960	·950	·954	·996	·036	·047	30·000	·950	·952	·974	30·016	30·028	·990
11	30·023	30·003	30·003	30·029	·079	·093	·029	·971	·947	·974	·007	·013	30·015
12	29·990	29·978	29·976	30·004	·056	·058	·006	·938	·920	·940	29·976	29·998	29·986
13	·962	·936	·933	29·964	·010	·023	29·981	·923	·902	·910	·939	·950	·953
14	·933	·917	·929	·957	29·985	29·991	·933	·885	·869	·889	·923	·941	·930
15	·920	·896	·892	·926	·968	·986	·940	·894	·882	·888	·928	·948	·923
16	·932	·922	·914	·948	·990	30·002	·944	·883	·876	·900	·934	·943	·933
17	·912	·894	·892	·916	·958	29·970	·922	·864	·846	·875	·924	·946	·910
18	·925	·900	·894	·919	·962	·974	·928	·870	·850	·884	·916	·934	·913
19	·912	·884	·886	·916	·958	·964	·928	·886	·874	·886	·916	·930	·911
20	·915	·887	·885	·901	·939	·957	·920	·866	·861	·883	·924	·938	·906
21	·912	·912	·918	·942	·985	·998	·955	·912	·914	·928	·948	·962	·942
22	·941	·917	·911	·936	·970	·982	·939	·889	·887	·910	·949	·955	·932
23	·933	·915	·908	·936	·970	·993	·959	·901	·893	·931	·963	·973	·941
24	·952	·927	·921	·947	·982	·997	·955	·887	·885	·913	·945	·954	·941
25	·933	·921	·909	·933	·972	·984	·935	·879	·873	·893	·933	·957	·927
26	·941	·931	·923	·944	·997	30·020	·981	·917	·906	·933	·972	·993	·956
27	·965	·932	·912	·926	·964	29·976	·942	·886	·864	·906	·958	·968	·932
28	·936	·896	·874	·902	·948	·976	·942	·880	·878	·914	·957	·972	·923
29	·950	·930	·908	·930	·982	·998	·950	·888	·860	·876	·910	·930	·925
30	·901	·869	·871	·903	·951	·954	·911	·857	·845	·869	·901	·916	·895
31	·899	·874	·874	·894	·939	·939	·898	·846	·838	·864	·908	·930	·892
Mean	29·949	29·928	29·923	29·950	29·993	30·003	29·958	29·904	29·894	29·913	29·953	29·967	29·945

Inches.

The highest tabulated value during the month = 30·088
The lowest " " " " = 29·799

The daily means are derived from 24 hourly values.

Inches.

The highest tabulated value during the month = 30·101
The lowest " " " " = 29·838

Rainfall (in inches) 1921.

June.

Date.	HOURS. 0–2	2–4	4–6	6–8	8–10	10–12	12–14	14–16	16–18	18–20	20–22	22–24	Daily total.	Maximum fall in one hour.	Time of occurrence.	Daily total by Newman's rain-gauge.
															h. to h.	
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5	..	..	..	..	0·03	..	..	..	..	..	..	..	0·03	0·03	9–10	0·03
6	..	0·02	..	..	..	..	..	..	..	..	..	..	0·02	0·02	1– 2	0·02
7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10	..	..	..	..	0·26	..	..	..	0·09	..	0·03	0·02	0·13	0·53	0·21	6– 7	0·54
11	..	0·05	0·04	..	0·35	0·04	0·36	0·06	..	0·03	0·23	1·59	0·15	2·90	1·29	20–21	2·94
12	..	0·25	0·24	0·02	..	..	0·02	..	..	..	..	0·19	0·02	0·74	0·19	21–22	0·75
13	..	0·15	0·48	1·24	0·46	0·08	..	..	..	..	..	0·01	0·03	2·45	0·99	5– 6	2·61
14	..	0·03	0·82	0·01	..	0·05	..	..	..	..	..	..	0·07	0·98	0·78	2– 3	1·01
15	..	..	..	0·03	..	..	..	..	0·12	0·10	..	..	0·01	0·26	0·12	14–15	0·27
16	..	0·09	..	0·06	..	..	..	..	..	0·10	0·01	..	0·02	0·28	0·09	1– 2	0·29
17	..	0·11	0·02	0·02	..	0·09	..	0·72	0·32	0·14	..	0·06	0·02	1·50	0·72	13–14	1·55
18	..	..	0·01	0·03	1·10	0·21	0·10	0·24	0·47	0·02	0·03	0·06	..	2·27	1·10	7– 8	2·36
19	..	0·11	..	..	0·08	2·74	2·54	0·02	0·08	..	0·24	0·81	0·92	7·54	2·51	10–11	7·68
20	..	0·31	0·65	0·54	0·13	0·13	0·22	..	0·01	1·13	3·29	0·35	0·10	6·26	1·86	19–20	6·40
21	..	0·11	..	..	..	0·01	..	..	..	..	..	..	..	0·12	0·08	1– 2	0·16
22	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
26	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
28	..	..	..	..	..	..	..	..	..	0·11	..	..	0·11	0·11	18–19	0·11
29	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
30	..	..	0·02	..	..	0·02	..	..	..	..	..	0·02	0·06	0·02	3– 4	0·07
Total	..	1·23	1·68	1·95	2·38	3·40	3·24	1·04	1·09	1·52	3·94	3 09	1·49	26·05	..	..	26·79

July.

Date.	HOURS. 0–2	2–4	4–6	6–8	8–10	10–12	12–14	14–16	16–18	18–20	20–22	22–24	Daily total.	Maximum fall in one hour.	Time of occurrence.	Daily total by Newman's rain-gauge.
															h. to h.	
1	..	..	0·01	0·06	..	..	..	0·03	..	..	..	..	0·10	0·05	4– 5	0·15
2	..	..	..	0·10	0·03	..	0·04	..	..	..	..	..	0·17	0·10	5– 6	0·16
3	..	0·02	..	..	..	..	..	..	0·02	..	..	..	0·04	0·02	1– 2	0·05
4	..	..	..	0·01	..	..	..	..	..	..	..	..	0·01	0·01	5– 6	0·01
5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	..	..	..	..	0·73	..	..	0·24	0·16	0·04	..	0·01	1·18	0·39	9–10	1·20
8	..	..	..	..	..	..	..	0·03	..	0·01	..	..	0·04	0·03	15–16	0·04
9	..	..	..	0·02	..	..	..	0·07	..	..	0·06	..	0·15	0·07	14–15	0·15
10	..	..	0·01	..	..	..	..	..	..	..	..	..	0·01	0·01	2– 3	0·02
11	..	..	..	0·11	..	..	..	..	..	0·14	0·50	0·02	0·77	0·41	20–21	0·79
12	..	..	..	0·03	..	0·29	0·66	1·12	0·79	0·32	0·31	0·30	0·21	4·03	1·06	12–13	4·23
13	..	0·05	..	..	..	..	..	..	..	..	..	..	0·05	0·04	0– 1	0·05
14	..	0·02	..	..	..	..	..	..	..	..	..	0·12	0·14	0·12	23–24	0·14
15	..	0·17	..	0·01	0·02	..	0·06	0·68	0·18	0·26	0·08	..	0·01	1·47	0·51	13–14	1·47
16	..	0·07	0·23	0·19	..	..	..	..	..	..	..	0·02	0·30	0·81	0·30	22–23	0·83
17	..	0·01	..	..	..	..	0·05	..	..	0·29	2·17	0·36	..	2·88	1·15	18–19	2·93
18	..	..	..	0·04	0·42	1·45	0·01	..	..	..	0·13	0·19	0·12	2·36	1·13	8– 9	2·42
19	..	0·01	0·09	2·02	0·75	0·21	..	..	..	0·03	0·19	0·86	0·05	4·21	1·27	4– 5	4·28
20	..	..	0·16	0·18	0·31	0·03	..	..	0·03	..	..	0·18	0·01	0·90	0·31	7– 8	0·88
21	..	0·06	0·34	1·23	0·05	0·11	0·38	0·02	..	..	0·10	0·02	..	2·31	1·02	4– 5	2·47
22	..	0·08	0·13	0·09	..	0·18	0·66	0·13	0·01	0·04	0·02	0·03	..	1·37	0·49	11–12	1·42
23	..	0·14	0·26	0·12	0·55	0·50	0·54	0·78	0·39	0·01	0·08	0·68	1·00	5·05	0·73	23–24	5·13
24	..	0·48	0·11	0·12	0·07	0·03	0·01	..	0·03	0·07	0·47	0·01	0·02	1·42	0·42	19–20	1·43
25	..	..	0·03	0·01	0·29	0·01	..	0·10	..	0·03	..	..	..	0·47	0·25	6– 7	0·49
26	..	0·05	0·45	0·71	0·31	0·39	0·39	0·08	0·19	0·12	0·23	0·09	0·01	3·02	0·48	4– 5	2·99
27	..	..	0·40	0·13	0·19	0·05	0·01	..	..	0·05	0·01	..	0·11	0·95	0·40	3– 4	0·98
28	..	0·03	..	0·01	0·02	..	0·02	0·22	0·12	0·05	..	..	..	0·47	0·22	13–14	0·47
29	..	0·09	0·04	..	0·04	0·04	..	..	..	0·02	..	..	0·03	0·26	0·09	0– 1	0·25
30	..	..	0·03	0·01	..	0·01	..	..	0·00	0·01	..	..	0·04	0·10	0·04	22–23	0·10
31	..	..	0·01	0·01	0·07	..	..	..	0·01	..	..	..	0·03	0·13	0·07	7 –8	0·14
Total	..	1·28	2·30	5·19	3·12	4·05	2·83	3·16	2·13	1·44	3·98	3·30	2.09	34·87	..	..	35·67

Rainfall (in inches), 1921.

August.

Date.	HOURS. 0–2	2–4	4–6	6–8	8–10	10–12	12–14	14–16	16–18	18–20	20–22	22–24	Daily total.	Maximum fall in one hour.	Time of occurrence.	Daily total by Newman's rain-gauge.
															h. to h.	
1	..	..	..	0·02	..	..	..	..	0·01	..	..	..	..	0·03	0·02	4— 5	0·04
2	..	..	..	..	..	..	..	..	..	0·04	0·05	0·24		0·33	0·21	22—23	0·33
3	..	0·19	0·10	0·02	0·02	..	..	..	..	..	..	..		0·33	0·19	0— 1	0·34
4	..	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..
5	..	..	..	0·29	0·03	..	..	..	..	..	..	0·01		0·33	0·28	4— 5	0·33
6	..	..	0·04	0·09	..	0·01	0·02	0·15	0·05	0·14	..	..	0·08	0·58	0·13	13—14	0·61
7	..	0·01	0·11	..	..	..	0·04	0·04	..	..	0·14	0·01	0·04	0·39	0·14	19—20	0·40
8	..	0·01	0·16	0·05	..	0·01	..	..	..	0·01	..	..	..	0·24	0·13	3— 4	0·24
9	..	0·04	0·17	..	0·73	0·86	1·24	0·04	0·46	..	..	..	..	3·54	0·81	10—11	3·58
10	..	..	..	0·65	0·06	0·11	..	..	..	..	..	0·06	..	0·88	0·33	5— 6	0·96
11	..	..	..	0·03	..	..	..	..	0·01	..	..	..	0·02	0·06	0·02	4— 5	0·06
12	..	0·03	..	..	..	0·06	..	..	..	..	..	0·05	..	0·14	0·06	9—10	0·14
13	..	0·01	..	..	..	0·03	..	0·05	0·03	0·01	0·01	0·01	..	0·15	0·03	9—10	0·17
14	..	0·09	..	..	..	..	..	..	0·10	..	0·07	..	..	0·26	0·09	1— 2	0·25
15	..	..	..	..	..	0·04	..	..	..	..	..	0·01	0·01	0·06	0·04	9—10	0·06
16	..	0·04	..	..	..	0·07	0·02	..	..	0·03	..	..	0·04	0·20	0·07	8— 9	0·20
17	..	0·02	0·11	0·06	..	0·01	0·02	..	0·06	0·07	..	0·02	0·05	0·42	0·08	2— 3	0·43
18	..	..	0·02	0·02	0·01	0·04	0·03	0·08	..	0·01	..	0·05	0·10	0·36	0·08	12—13	0·36
19	..	0·13	0·08	..	..	0·01	0·01	0·21	0·03	..	0·06	..	0·01	0·54	0·21	13—14	0·35
20	..	..	0·02	..	0·02	..	..	..	..	..	..	..	..	0·04	0·02	3— 4	0·04
21	..	..	..	0·02	0·01	..	..	..	..	..	..	..	..	0·03	0·02	5— 6	0·04
22	..	0·03	0·19	0·01	0·13	0·01	..	..	..	..	..	..	..	0·37	0·12	3— 4	0·41
23	..	..	..	..	..	..	..	..	..	..	..	..	0·26	0·26	0·26	23—24	0·27
24	..	..	0·04	..	..	..	..	..	..	..	..	..	..	0·04	0·04	3— 4	0·05
25	..	..	..	..	0·09	..	..	..	..	..	..	..	..	0·09	0·07	6— 7	0·10
26	..	..	..	..	0·07	..	..	..	0·01	..	..	0·04	..	0·12	0·07	7— 8	0·12
27	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
28	..	..	..	..	..	0·04	..	..	..	..	..	..	0·10	0·14	0·10	22—23	0·14
29	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
30	..	..	..	..	..	..	..	0·06	0·04	..	..	..	..	0·10	0·06	13—14	0·10
31	..	..	0·01	..	0·04	0·01	..	..	..	..	0·02	..	0·03	0·11	0·04	7— 8	0·11
Total ..	60	1·05	1·26	1·21	1·31	1·38	0·63	0·80	0·27	0·34	0·30	0·99		10·14	..	..	10·37

September.

Date.	HOURS. 0–2	2–4	4–6	6–8	8–10	10–12	12–14	14–16	16–18	18–20	20–22	22–24	Daily total.	Maximum fall in one hour.	Time of occurrence.	Daily total by Newman's rain-gauge.
															h. to h.	
1	..	0·03	0·02	..	..	..	..	..	..	0·17	0·23	..	0·12	0·57	0·17	16—17	0·58
2	..	..	0·08	..	0·03	..	0·06	0·04	..	0·01	..	..	..	0·22	0·08	2— 3	0·22
3	..	..	..	..	..	0·10	..	..	..	..	..	..	..	0·10	0·07	8— 9	0·10
4	..	..	..	..	..	0·01	0·03	..	..	..	..	..	..	0·04	0·03	10—11	0·04
5	..	..	..	..	..	0·07	0·04	0·03	0·03	..	..	..	..	0·17	0·07	9—10	0·16
6	..	..	..	..	..	..	0·05	0·23	0·39	0·27	..	0·08		1·02	0·30	16—17	1·01
7	..	..	0·16	0·57	0·21	0·01	..	0·01	..	..	0·03	..		0·99	0·49	5— 6	1·05
8	..	..	0·02	..	0·06	..	..	..	..	..	..	..		0·08	0·06	7— 8	0·08
9	..	..	..	..	..	..	..	0·15	..	..	..	..		0·15	0·15	14—15	0·14
10	..	0·01	..	..	..	..	0·04	..	0·02	..	..	..	..	0·07	0·03	10—11	0·07
11	..	..	..	..	..	..	..	..	..	..	0·02	0·01		0·03	0·02	21—22	0·03
12	..	0·03	..	0·03	..	..	..	..	..	..	..	..	..	0·03	0·03	4— 5	0·03
13	..	0·03	..	..	..	..	0·02	..	..	0·09	..	0·06		0·20	0·07	19—20	0·20
14	..	..	0·37	0·14	0·01	..	0·01	..	0·06	0·01	..	..		0·60	0·37	3— 4	0·62
15	..	0·08	..	..	0·36	..	..	0·01	..	0·41	..	0·21	0·07	1·14	0·34	7— 8	1·15
16	..	0·17	0·12	0·76	..	0·02	0·21	0·06	..	..	..	0·02	0·05	1·41	0·65	4— 5	1·44
17	..	0·01	..	..	0·59	0·97	0·50	0·07	0·04	..	..	..	0·01	2·19	0·76	8— 9	2·23
18	..	0·05	0·10	0·03	0·29	0·03	0·75	0·80	0·01	0·03	..	0·01	..	2·10	0·53	10—11	2·09
19	..	0·04	0·21	..	0·03	0·07	..	..	..	..	0·02	0·08	..	0·45	0·11	3— 4	0·45
20	..	0·02	..	..	..	..	0·01	..	..	..	..	..	..	0·03	0·02	1— 2	0·03
21	..	..	0·05	..	0·01	..	..	0·10	..	..	..	..	..	0·16	0·08	15—16	0·15
22	..	..	..	..	..	..	0·21	..	..	..	..	..	..	0·21	0·11	15—16	0·22
23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25	..	..	..	0·36	0·35	0·03	..	..	..	..	..	..	..	0·74	0·36	7— 8	0·75
26	..	..	0·05	0·04	..	..	..	..	..	..	..	..	..	0·09	0·05	2— 3	0·10
27	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
28	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
29	..	..	..	0·02	0·01	..	..	..	..	..	..	..	..	0·03	0·02	5— 6	0·03
30	..	..	..	..	..	..	..	..	..	0·16	..	..	..	0·16	0·14	18—19	0·16
Total ..	0·44	1·18	1·59	1·96	1·63	1·68	1·09	0·79	1·07	0·78	0·37	0·40		12·98	..	..	13·13

There was an additional fall of 0·02 inch on the 9th October between 19h and 20h and of 0·04 inch on the 10th October between 21h and 22h.
No rainfall occurred during the months January to May, November and December.
Total fall of rain in the year was 84·10 inches by Pluviograph and 86·02 inches by Newman's rain-gauge.
Total number of rainy days in the year = 78 (A 'rainy day' is assumed to be that on which a tenth of an inch or upwards has fallen).
The greatest daily fall of rain in the year (that of 19th June) was 7·54 inches by Pluviograph and 7·68 inches by Newman's rain-gauge.

Wind Velocity (in miles per hour), 1921.

January.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
														H. M.		H. M.	
1 ..	1	3	5	6	4	4	1	8	9	11	9	7	5·9	19 47	12	0 30	0
2 ..	3	3	4	5	4	3	4	7	7	9	4	4	4·8	19 12	10	11 15	1
3 ..	4	1	3	5	6	5	3	7	6	9	7	5	5·3	18 19	10	2 45	0
4 ..	2	1	5	6	7	7	4	6	5	8	9	4	5·6	20 17	10	2 22	0
5 ..	4	2	5	4	5	2	2	6	8	11	2	4	5·0	18 24	12	3 15	0
6 ..	4	3	3	6	4	5	3	7	7	8	4	4	5·2	18 7	9	1 38	0
7 ..	2	3	4	4	6	2	4	7	6	6	5	1	4·2	16 42	8	21 35	0
8 ..	2	5	4	3	2	3	6	10	11	10	3	3	5·3	16 35	12	0 48	0
9 ..	2	4	4	4	4	3	6	7	8	10	8	5	5·8	19 37	12	0 20	1
10 ..	3	4	2	2	4	4	4	5	5	8	3	5	4·3	17 42	9	4 43	0
11 ..	4	4	4	2	4	3	2	7	6	6	5	4	4·3	15 8	8	11 56	0
12 ..	4	7	3	3	5	6	5	7	11	12	7	4	6·3	17 37	13	10 8	0
13 ..	3	6	7	7	6	7	10	13	15	16	10	5	9·3	17 0	*17	1 25	2
14 ..	7	5	7	6	4	6	11	9	12	14	14	7	8·7	19 0	*15	7 0	*4
15 ..	7	6	4	5	3	1	4	7	9	9	7	5	5·8	15 0	*10	10 0	*1
16 ..	3	2	2	4	5	7	7	10	13	12	9	7	6·9	17 0	*14	5 0	*1
17 ..	7	7	7	7	5	7	11	11	9	14	11	7	8·8	17 52	15	7 0	*3
18 ..	6	8	7	8	4	7	10	14	15	12	10	9	9·0	15 0	18	8 22	2
19 ..	5	7	5	5	2	1	7	8	9	9	4	3	5·4	19 10	10	11 30	0
20 ..	4	1	0	3	4	3	7	8	7	5	5	5	4·4	15 20	9	4 22	0
21 ..	5	8	10	7	4	7	7	10	10	12	7	4	7·6	18 47	14	8 5	3
22 ..	4	3	3	3	3	6	4	7	12	12	12	9	6·9	19 40	13	7 45	2
23 ..	4	7	10	5	5	5	7	10	14	14	12	7	8·4	19 25	16	9 10	3
24 ..	4	3	5	6	6	7	7	8	14	11	4	5	6·8	16 28	15	2 35	2
25 ..	3	5	10	11	11	10	5	4	10	10	9	7	7·9	16 25	12	0 35	2
26 ..	4	5	6	6	9	6	2	4	6	9	8	3	5·8	19 50	10	23 10	1
27 ..	0	4	8	7	7	1	6	6	6	6	4	4	5·1	3 35	9	0 17	0
28 ..	3	4	6	4	4	3	5	5	10	7	8	5	5·5	16 45	11	9 50	0
29 ..	3	2	3	3	3	5	8	9	11	13	11	4	6·3	17 13	15	2 44	0
30 ..	2	4	1	4	3	1	6	7	10	14	11	1	5·6	18 52	16	4 32	0
31 ..	2	3	5	4	3	2	7	8	9	9	8	5	5·9	19 40	11	0 15	2
Mean ..	3·6	4·2	4·9	5·0	4·7	4·5	5·6	7·8	9·4	10·2	7·4	4·9	6·2	..	..	..	..

February.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
														H. M.		H. M.	
1 ..	4	4	8	4	3	2	4	9	10	14	9	5	6·5	18 25	16	7 5	0
2 ..	4	7	4	4	5	6	6	10	12	9	10	4	6·8	16 25	13	8 0	2
3 ..	3	4	6	6	5	2	8	9	10	9	9	6	6·4	16 13	11	7 33	0
4 ..	2	3	3	5	7	9	9	10	9	11	9	6	7·2	18 25	12	0 5	2
5 ..	4	3	5	7	9	6	8	9	9	9	7	5	6·8	16 15	11	0 28	0
6 ..	3	3	3	4	6	5	8	8	9	8	6	4	5·8	12 5	9	3 25	3
7 ..	4	2	4	5	6	6	8	7	8	4	2	3	5·0	11 50	9	21 10	0
8 ..	4	4	5	5	7	6	7	10	11	10	13	6	7·6	20 50	15	11 35	0
9 ..	5	4	4	4	3	5	6	10	10	14	12	6	6·9	18 27	15	11 20	0
10 ..	3	3	3	6	7	5	4	7	12	9	5	4	5·9	16 28	16	23 45	1
11 ..	1	4	6	4	4	5	4	4	6	1	2	4	4·1	9 47	8	18 18	0
12 ..	3	4	7	7	3	8	8	8	7	3	2	2	5·2	5 25	10	20 50	0
13 ..	1	1	5	3	3	4	6	7	7	7	5	5	4·7	19 20	9	0 22	1
14 ..	4	6	4	4	5	4	11	12	14	18	13	8	9·1	18 47	20	10 16	0
15 ..	6	5	6	7	7	7	2	6	11	11	10	9	7·4	17 47	14	13 5	2
16 ..	3	8	8	10	10	9	5	2	8	12	13	6	8·0	20 37	14	14 45	0
17 ..	1	6	4	6	3	3	5	7	8	7	8	4	5·3	15 35	11	0 2	0
18 ..	1	1	4	4	4	3	8	9	10	7	5	4	5·6	16 20	12	0 30	0
19 ..	5	6	5	2	4	4	7	8	9	7	3	3	5·2	17 0	11	8 2	0
20 ..	1	3	4	7	4	2	7	8	10	9	7	4	5·7	16 45	11	0 15	0
21 ..	3	4	3	2	5	3	6	8	9	10	8	4	5·7	17 50	12	7 25	0
22 ..	2	7	4	5	4	2	7	8	9	7	3	3	5·4	16 30	10	10 46	0
23 ..	5	6	4	3	4	3	6	10	12	11	3	3	6·1	16 47	14	10 5	0
24 ..	3	2	7	3	4	5	8	7	7	9	1	1	5·0	17 44	11	20 13	0
25 ..	2	0	0	4	5	3	5	7	4	1	3	4	3·1	14 29	8	1 10	0
26 ..	2	1	3	3	5	3	7	7	6	3	1	6	4·0	13 0	9	2 20	0
27 ..	2	3	3	1	4	4	7	10	12	9	10	9	6·7	15 50	14	6 32	0
28 ..	4	4	6	7	4	5	10	11	9	10	9	10	7·6	14 36	13	10 15	0
Mean ..	3·0	3·9	4·6	4·7	5·0	4·6	6·7	8·1	9·2	8·5	6·7	4·9	6·0	..	..	..	..

* Derived from Beckley (converted to Dines') Dines' records having been lost.
The daily means are derived from 24 hourly values.
The velocity at any hour represents the movement of wind during one hour from that hour to the next hour.

Wind Velocity (in miles per hour), 1921.

March.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
														H. M.		H. M.	
1 ..	7	6	4	7	7	7	8	11	11	11	13	7	8·0	20 7	14	9 0	3
2 ..	4	2	5	4	3	1	8	9	9	14	9	6	6·5	18 10	15	10 50	0
3 ..	5	4	3	4	5	5	10	10	13	17	10	3	7·5	17 32	18	8 25	2
4 ..	8	6	4	5	6	4	5	10	10	8	4	6	6·3	14 38	11	3 20	2
5 ..	6	2	1	10	6	4	5	5	6	0	6	4	4·7	6 36	11	0 48	0
6 ..	3	2	1	3	7	7	5	6	6	3	0	0	3·9	8 5	8	2 23	0
7 ..	1	2	2	7	7	4	6	7	6	3	0	1	4·0	7 20	9	0 2	0
8 ..	2	6	8	5	3	5	7	9	8	6	3	2	5·4	3 30	11	0 27	0
9 ..	3	2	4	7	5	2	4	8	7	6	7	5	5·3	14 19	13	9 15	0
10 ..	4	3	2	1	6	3	4	6	6	4	2	1	3·8	1 18	9	6 45	0
11 ..	1	1	1	5	5	4	4	10	11	13	10	12	6·6	18 33	14	3 29	0
12 ..	7	4	3	3	2	5	9	11	10	10	11	9	7·1	19 23	13	9 52	0
13 ..	3	4	4	3	2	7	10	12	12	10	8	8	7·4	14 12	13	6 25	0
14 ..	11	10	3	3	4	6	10	10	11	9	9	4	7·5	0 18	13	7 30	2
15 ..	9	9	10	3	5	1	7	9	7	1	7	1	5·7	1 45	12	6 50	0
16 ..	2	0	3	9	3	1	7	11	9	9	4	1	4·9	14 28	12	1 15	0
17 ..	1	0	9	8	4	3	7	9	11	8	7	1	5·7	16 17	13	1 45	0
18 ..	6	3	4	4	6	2	6	10	11	9	4	1	5·7	15 25	12	21 10	1
19 ..	2	4	2	2	4	2	5	9	10	6	5	2	4·4	16 0	12	5 30	0
20 ..	4	4	3	9	9	3	4	7	8	7	5	2	5·5	16 12	12	11 15	0
21 ..	1	3	3	4	5	4	9	11	12	12	8	7	6·9	17 20	13	0 2	0
22 ..	8	4	5	4	7	4	10	8	6	7	7	9	6·8	12 57	12	1 48	3
23 ..	11	12	7	5	6	11	10	12	11	6	7	8	9·1	14 7	13	5 8	4
24 ..	10	8	4	4	9	8	15	16	16	14	13	15	11·3	14 22	18	4 25	3
25 ..	12	6	5	5	5	12	15	15	17	13	11	9	10·5	16 28	18	7 5	3
26 ..	4	4	4	1	3	6	11	12	14	13	2	3	6·4	16 48	15	6 15	0
27 ..	7	6	1	5	7	7	7	7	5	1	1	3	5·0	9 0	10	3 47	0
28 ..	1	3	4	4	4	4	6	7	10	10	9	9	6·1	16 17	12	0 25	0
29 ..	4	2	2	1	2	3	7	12	10	12	12	9	6·6	21 22	13	5 30	0
30 ..	7	2	6	4	3	6	9	10	9	7	6	4	6·1	13 45	11	9 10	1
31 ..	6	4	5	5	4	7	9	10	10	10	6	7	7·2	15 16	12	7 55	2
Mean ..	5·2	4·1	3·9	4·6	5·0	4·8	7·7	9·6	9·7	8·4	6·6	5·1	6·4	..	..	..	..

April.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
														H. M.		H. M.	
1 ..	9	7	4	2	3	4	9	10	6	3	6	7	6·1	23 21	12	3 32	0
2 ..	9	4	2	0	6	2	4	9	7	6	1	2	4·5	15 42	11	5 52	0
3 ..	2	8	3	0	2	2	5	8	7	4	3	2	3·9	2 8	11	6 17	0
4 ..	1	1	2	2	7	5	6	6	6	3	4	3	4·1	14 53	8	0 7	0
5 ..	4	7	5	6	8	8	9	8	4	4	2	1	5·7	9 28	10	22 45	0
6 ..	0	1	4	6	6	4	7	10	10	4	2	0	4·9	15 29	12	0 1	0
7 ..	1	7	8	4	4	3	5	9	8	2	7	5	5·4	21 23	14	0 2	0
8 ..	4	8	1	1	2	3	9	11	10	6	5	3	5·1	16 4	12	0 2	0
9 ..	5	3	3	1	1	4	6	9	7	6	5	3	4·8	14 25	11	4 12	0
10 ..	4	6	4	6	4	6	8	10	12	9	6	5	6·7	16 9	14	9 45	1
11 ..	6	4	1	0	1	4	6	7	4	3	4	3	3·8	0 17	8	3 30	0
12 ..	7	7	3	3	5	4	4	6	6	3	9	5	5·1	20 37	11	4 10	0
13 ..	6	2	4	1	2	3	5	6	8	5	1	0	3·8	16 40	9	2 17	0
14 ..	0	1	3	7	4	6	6	10	10	6	4	2	5·2	15 35	13	0 1	0
15 ..	4	5	3	4	10	7	7	9	9	5	3	1	5·6	7 32	14	6 18	0
16 ..	0	2	1	6	3	4	6	10	9	8	4	1	4·9	15 50	11	0 1	0
17 ..	1	2	4	8	4	4	6	9	11	8	3	2	5·5	16 12	13	1 16	0
18 ..	1	0	1	7	4	3	7	11	10	12	8	7	6·2	18 14	14	0 25	0
19 ..	4	4	4	3	2	7	8	10	10	11	11	11	7·5	15 5	12	10 0	0
20 ..	5	4	4	4	6	6	9	12	12	10	7	9	7·7	14 50	14	5 0	2
21 ..	8	4	3	0	0	5	8	7	8	9	9	6	5·5	20 15	11	5 54	0
22 ..	3	2	2	1	3	4	6	9	8	5	6	7	5·2	23 45	10	3 22	0
23 ..	8	11	3	4	7	4	8	10	14	10	4	8	7·9	16 42	16	9 25	1
24 ..	6	0	10	2	3	4	8	9	14	12	9	7	7·0	16 49	16	1 22	0
25 ..	4	4	4	2	2	4	8	10	12	9	11	11	6·7	21 7	14	1 20	0
26 ..	6	4	2	1	2	4	6	8	9	7	6	8	5·6	15 44	10	3 3	0
27 ..	8	5	4	5	4	5	9	12	12	13	11	10	8·4	17 16	15	9 5	2
28 ..	9	4	4	3	5	7	11	13	13	10	11	13	8·6	14 33	15	8 15	2
29 ..	9	6	7	5	5	10	12	15	14	13	10	11	10·0	17 30	17	7 50	3
30 ..	11	3	3	1	4	7	9	10	11	11	9	2	6·8	15 30	13	5 40	1
Mean ..	4·8	4·1	3·5	3·2	4·0	4·8	7·2	9·4	9·4	7·2	6·0	5·2	5·9	..	..	..	..

The daily means are derived from 24 hourly values.

The velocity at any hour represents the movement of wind during one hour from that hour to the next hour.

Wind Velocity (in miles per hour), 1921.

May.

Date.	HOURS.												Mean.	Maximum.			Minimum.		
	0	2	4	6	8	10	12	14	16	18	20	22		Time.		Mag.	Time.		Mag.
														H.	M.		H.	M.	
1 ..	3	3	1	0	6	4	7	9	8	5	4	7	5·0	22	40	11	5	12	0
2 ..	7	7	8	7	6	7	7	7	6	4	2	3	5·9	1	30	10	20	25	1
3 ..	2	2	4	5	7	7	8	8	7	6	5	4	5·4	12	38	9	0	12	1
4 ..	2	2	1	1	2	4	6	7	6	5	3	3	3·8	13	30	8	5	0	0
5 ..	2	1	1	4	3	4	6	9	9	5	6	3	4·9	15	30	11	2	50	0
6 ..	4	4	3	1	1	4	8	11	10	7	5	5	5·5	15	11	12	6	18	0
7 ..	3	2	0	1	5	5	6	7	8	7	6	5	4·6	16	33	9	3	30	0
8 ..	3	2	3	2	3	4	7	10	10	7	6	5	5·4	14	34	11	1	6	0
9 ..	5	3	2	3	5	5	9	8	9	9	4	5	5·7	15	45	12	8	50	1
10 ..	6	7	3	4	3	8	9	10	12	10	6	5	6·8	16	37	13	8	16	0
11 ..	4	4	5	4	7	8	11	12	11	12	12	10	8·5	19	32	14	2	24	3
12 ..	6	3	3	4	12	8	9	7	5	5	6	0	5·8	8	50	13	22	21	0
13 ..	3	3	2	1	2	4	7	9	7	5	5	1	4·2	14	44	10	22	46	0
14 ..	0	1	1	2	3	5	6	11	11	7	4	3	4·6	15	37	12	0	1	0
15 ..	1	2	1	2	2	5	8	8	7	6	7	5	4·6	13	3	9	1	0	0
16 ..	4	3	3	2	3	4	6	7	7	7	4	4	4·6	14	42	9	5	50	0
17 ..	4	6	4	2	2	3	4	7	6	5	4	4	4·3	14	37	8	6	34	0
18 ..	1	2	0	2	1	2	5	6	6	3	4	5	3·4	12	51	7	3	42	0
19 ..	6	3	3	1	3	4	5	7	7	5	5	4	4·6	14	58	8	6	4	0
20 ..	4	5	3	1	4	7	5	7	6	4	5	3	5·0	14	45	8	6	17	0
21 ..	1	4	2	3	3	4	5	7	7	6	5	5	4·8	13	37	9	0	17	0
22 ..	3	4	3	2	4	5	8	9	9	6	4	4	5·4	15	42	10	6	6	0
23 ..	5	5	5	5	4	6	7	8	8	8	5	5	6·1	14	30	9	4	46	0
24 ..	6	7	5	5	5	5	6	6	8	6	4	5	5·7	14	18	9	21	25	1
25 ..	6	4	4	4	6	8	7	8	8	6	5	5	6·1	14	33	9	4	14	0
26 ..	5	6	6	5	4	7	6	7	7	6	4	7	5·8	14	26	9	1	30	1
27 ..	6	3	3	1	6	7	6	8	7	6	2	4	4·9	14	11	9	7	17	1
28 ..	3	3	3	4	4	3	4	6	7	5	5	4	4·5	17	9	8	2	15	0
29 ..	3	5	4	5	5	7	7	7	7	5	5	4	5·3	13	42	8	1	50	1
30 ..	3	2	1	5	4	4	5	5	5	5	3	2	3·8	14	37	8	4	5	0
31 ..	1	1	1	1	2	3	4	6	4	3	2	1	3·0	13	28	7	0	4	0
Mean ..	3·6	3·5	2·8	2·9	4·1	5·2	6·6	7·9	7·6	6·1	4·7	4·2	5·1	..		..	..		..

June.

Date.	HOURS.												Mean.	Maximum.			Minimum.		
	0	2	4	6	8	10	12	14	16	18	20	22		Time.		Mag.	Time.		Mag.
														H.	M.		H.	M.	
1 ..	1	1	2	3	3	2	4	6	6	4	4	2	3·3	14	37	7	0	7	0
2 ..	1	3	4	3	3	3	4	6	6	4	3	2	3·9	15	32	8	18	45	0
3 ..	3	2	1	1	4	8	10	7	4	4	4	7	4·9	11	50	15	6	27	0
4 ..	8	5	6	10	9	10	8	7	8	8	6	5	7·7	5	12	13	21	25	2
5 ..	6	3	3	3	7	4	4	4	5	5	4	4	4·5	7	35	11	1	55	0
6 ..	4	3	3	3	2	2	4	4	6	4	4	4	3·9	0	47	7	6	55	0
7 ..	6	4	4	3	5	8	7	8	8	6	6	4	5·7	14	38	9	5	53	0
8 ..	4	5	1	2	3	4	6	7	8	5	3	3	4·3	16	25	9	4	12	0
9 ..	1	2	0	8	5	4	7	8	8	7	10	12	6·2	23	28	20	4	23	0
10 ..	13	11	12	8	14	6	11	8	4	5	6	9	8·8	8	13	15	15	58	0
11 ..	9	2	2	5	5	2	10	7	6	3	5	3	5·1	11	38	14	2	3	0
12 ..	6	4	6	14	6	3	2	6	4	6	4	8	6·4	5	18	15	13	0	0
13 ..	10	10	6	11	12	13	19	12	9	8	5	4	9·7	12	46	22	5	48	0
14 ..	3	5	2	12	4	5	7	8	9	7	5	6	6·5	17	53	16	4	44	1
15 ..	8	3	12	15	11	11	5	4	7	17	8	7	9·2	17	45	22	14	25	2
16 ..	11	5	5	6	13	7	0	10	8	9	5	5	8·0	18	55	17	5	54	2
17 ..	7	9	4	7	6	7	7	7	4	8	12	6	7·1	13	32	16	4	37	1
18 ..	5	7	8	4	5	3	7	5	7	6	6	3	5·8	13	48	17	2	54	2
19 ..	5	4	12	10	12	10	15	11	8	9	9	10	9·3	10	10	18	7	25	0
20 ..	8	11	9	11	7	12	4	15	7	10	5	7	9·1	10	6	18	11	2	0
21 ..	11	14	9	8	9	8	9	8	9	8	10	10	9·8	2	57	16	4	53	4
22 ..	8	7	7	8	8	8	8	8	8	7	8	7	7·7	12	24	10	11	15	2
23 ..	8	7	7	7	7	8	7	6	7	6	6	4	6·5	0	16	11	2	36	4
24 ..	6	6	6	6	6	6	6	6	5	5	6	5	5·9	0	16	8	14	17	3
25 ..	6	5	8	4	5	5	6	7	6	5	6	5	5·8	4	20	9	5	54	3
26 ..	5	6	4	4	5	6	7	6	6	5	4	5	5·6	13	4	8	6	42	2
27 ..	6	6	8	7	6	5	5	6	6	6	6	8	6·6	3	52	9	1	0	3
28 ..	6	5	5	6	6	7	7	9	7	5	8	6	6·9	18	7	14	18	36	0
29 ..	6	6	5	5	3	4	4	5	7	5	1	3	4·5	16	7	14	17	28	1
30 ..	3	4	3	3	6	4	4	4	3	2	3	2	3·8	23	35	12	2	0	2
Mean ..	6·1	5·5	5·5	6·6	6·6	6·2	7·1	7·2	6·5	6·3	5·7	5·5	6·4	..		..	..		..

The daily means are derived from 24 hourly values.

The velocity at any hour represents the movement of wind during one hour from that hour to the next hour.

Wind Velocity (in miles per hour), 1921.

July.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
													•	H. M.		H. M.	
1 ..	6	12	12	3	4	4	5	7	7	4	4	3	6·4	5 17	14	6 42	2
2 ..	4	5	5	6	7	7	7	7	10	9	7	9	7·2	19 6	13	5 46	0
3 ..	8	7	6	5	7	6	6	6	7	6	6	4	6·3	6 4	10	21 50	2
4 ..	4	6	4	4	6	7	6	8	10	9	8	6	7·0	0 7	16	12 6	2
5 ..	7	7	4	5	7	8	9	10	10	10	9	9	8·4	12 52	13	6 4	2
6 ..	10	8	7	6	5	6	9	10	8	7	7	5	7·7	0 21	12	8 13	2
7 ..	6	7	7	7	7	10	6	11	6	4	6	10	7·1	14 5	15	19 42	0
8 ..	6	6	7	4	4	4	4	4	8	3	1	1	4·2	15 11	14	7 49	0
9 ..	5	6	9	7	10	7	5	6	5	4	3	3	5·7	8 48	15	20 52	0
10 ..	3	4	3	3	3	4	4	3	2	5	4	8	4·2	22 7	12	8 15	1
11 ..	10	12	8	1	7	9	7	2	1	4	6	6	6·0	3 13	16	14 28	0
12 ..	8	8	9	7	6	10	5	5	6	3	9	10	7·0	20 59	15	8 30	0
13 ..	2	4	6	7	4	4	5	6	4	2	1	7	5·1	23 38	13	3 16	0
14 ..	6	2	4	5	4	2	4	3	4	5	6	9	4·4	22 18	11	1 42	0
15 ..	4	4	5	8	4	8	4	10	10	8	10	8	7·4	19 50	16	13 3	0
16 ..	6	8	9	5	14	15	9	7	6	7	5	6	8·5	11 3	24	21 55	1
17 ..	10	9	15	14	15	15	4	4	5	4	13	7	9·5	20 25	21	18 24	0
18 ..	1	6	7	3	10	4	1	3	6	6	6	7	4·9	8 4	15	0 1	0
19 ..	1	3	5	6	4	4	10	9	12	6	6	6	6·2	15 22	20	0 37	0
20 ..	4	4	4	6	1	6	5	8	3	3	3	4	4·6	14 14	16	2 20	0
21 ..	3	7	13	9	10	11	10	10	8	9	8	8	9·4	11 31	24	0 30	1
22 ..	9	9	8	10	10	10	6	7	9	11	10	11	9·4	19 18	22	11 32	1
23 ..	14	12	8	14	11	11	10	12	14	19	17	14	13·1	20 19	34	9 44	1
24 ..	11	13	14	12	13	8	7	9	7	12	9	11	11·2	4 15	28	20 32	2
25 ..	10	11	9	9	8	8	8	9	7	7	9	8	8·7	6 17	22	11 55	1
26 ..	11	8	14	9	10	10	8	10	15	12	12	11	10·7	16 58	29	3 42	1
27 ..	10	10	10	11	11	11	14	10	12	11	11	12	11·4	19 47	26	13 47	2
28 ..	11	11	12	10	13	11	10	13	12	12	10	9	11·8	1 37	23	5 10	2
29 ..	10	10	10	8	11	10	10	10	13	11	12	9	10·6	16 57	19	0 4	2
30 ..	8	11	14	13	13	10	14	13	13	11	11	7	11·7	11 49	25	22 47	2
31 ..	8	8	9	9	8	7	7	7	8	7	8	7	8·0	23 7	15	23 38	1
Mean ..	7·0	7·7	8·3	7·3	8·0	8·0	7·1	7·7	8·0	7·5	7·6	7·6	7·9	..	..	..	..

August.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
														H. M.		H. M.	
1 ..	9	6	7	6	7	6	7	7	8	7	7	8	7·4	14 54	16	9 8	1
2 ..	7	8	7	8	5	6	6	10	7	4	8	12	7·2	22 32	20	15 30	1
3 ..	10	10	12	8	7	6	5	7	8	7	6	8	8·0	4 17	20	17 37	2
4 ..	8	10	9	12	9	7	6	9	8	7	8	7	8·3	6 15	18	15 52	2
5 ..	9	8	10	7	9	8	9	8	9	5	7	8	7·9	8 32	18	9 41	1
6 ..	11	11	6	8	11	12	7	5	10	9	9	5	8·7	10 28	22	13 57	1
7 ..	13	9	12	10	9	9	7	7	8	8	6	8	8·9	11 25	25	1 26	1
8 ..	14	11	9	8	8	9	10	7	12	8	8	7	9·1	16 17	21	22 40	1
9 ..	3	6	8	9	7	9	9	9	10	7	6	7	7·4	14 28	17	15 31	1
10 ..	6	8	9	2	11	11	10	12	11	9	11	6	9·5	17 23	20	6 48	1
11 ..	7	8	10	9	6	14	7	12	10	8	8	8	9·2	15 55	22	8 45	2
12 ..	10	12	11	10	10	12	16	14	11	9	9	9	11·2	13 20	21	18 30	2
13 ..	7	9	10	8	8	6	7	7	8	6	7	8	8·2	12 57	18	14 17	1
14 ..	8	8	10	7	6	5	6	7	5	6	6	7	7·0	19 22	14	9 53	2
15 ..	7	6	5	6	6	6	7	7	9	6	8	9	7·1	23 38	18	20 47	2
16 ..	8	9	8	9	9	8	8	10	8	8	10	11	8·8	6 47	21	15 30	2
17 ..	7	9	9	9	8	8	9	8	9	10	9	10	9·3	1 29	24	13 28	2
18 ..	7	9	8	9	10	7	8	10	11	12	10	12	9·5	17 18	23	3 48	2
19 ..	6	11	10	8	7	7	7	9	9	10	13	11	9·4	2 31	22	12 6	2
20 ..	9	9	10	8	9	9	8	9	6	4	5	6	7·9	5 37	18	21 46	2
21 ..	6	6	6	5	4	5	5	7	4	5	7	10	6·5	10 3	15	9 17	2
22 ..	10	7	10	11	11	9	6	5	5	2	4	12	7·5	22 0	21	12 13	1
23 ..	7	5	4	3	4	6	7	6	6	6	7	9	6·0	22 36	15	23 54	1
24 ..	2	6	5	6	6	4	5	4	3	3	2	2	4·6	2 43	12	0 1	1
25 ..	4	3	4	6	5	11	4	4	5	4	3	6	4·6	10 12	15	11 13	1
26 ..	4	4	4	4	3	6	5	6	5	3	4	4	4·6	15 57	16	8 13	0
27 ..	6	4	2	4	4	5	5	4	3	3	2	3	3·9	17 6	10	3 13	1
28 ..	3	3	5	4	4	7	5	6	4	4	6	3	4·7	9 24	16	23 22	0
29 ..	3	6	5	6	4	5	7	7	6	6	5	4	5·7	12 56	11	3 17	1
30 ..	5	5	6	4	6	4	7	6	8	5	5	5	5·6	15 43	17	17 44	0
31 ..	4	3	6	5	5	8	8	7	8	8	4	7	6·5	23 2	18	8 10	1
Mean ..	7·1	7·4	7·6	7·1	7·0	7·5	7·2	7·6	7·6	6·4	6·8	7·5	7·4	..	..	..	..

The daily means are derived from 24 hourly values.

The velocity at any hour represents the movement of wind during one hour from that hour to the next hour.

Wind Velocity (in miles per hour), 1921.

September.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
														H. M.		H. M.	
1 ..	9	7	9	9	10	8	9	8	6	4	9	11	8·2	8 32	19	19 22	0
2 ..	12	8	14	13	11	11	14	12	18	17	14	12	12·9	19 5	25	13 36	2
3 ..	12	12	12	14	12	9	10	10	10	9	9	7	10·4	7 17	22	9 8	1
4 ..	8	6	7	7	10	8	8	7	6	7	7	8	7·6	9 25	20	1 48	1
5 ..	8	8	8	6	5	4	5	7	8	6	4	4	6·3	11 33	15	11 4	1
6 ..	4	5	6	5	4	7	8	4	6	8	9	6	6·1	20 48	17	11 25	1
7 ..	7	7	7	5	8	6	7	6	6	7	8	7	7·5	7 33	18	6 33	1
8 ..	7	7	7	5	7	7	8	6	6	6	6	5	6·6	10 4	15	12 7	1
9 ..	5	7	6	6	6	6	6	6	6	4	7	6	6·4	20 52	20	11 30	1
10 ..	7	8	7	10	8	8	8	8	8	9	8	7	8·4	15 23	17	10 17	1
11 ..	6	8	9	8	10	8	8	10	11	10	8	6	8·8	15 24	20	23 30	1
12 ..	10	9	9	9	1.	9	6	11	10	12	11	8	9·8	23 47	18	11 27	2
13 ..	11	11	12	11	10	10	7	10	9	11	10	8	10·5	21 24	21	12 17	0
14 ..	10	11	8	10	10	9	10	12	10	10	11	11	10·2	17 42	23	17 48	1
15 ..	10	10	9	7	8	7	7	13	6	7	1	3	7·7	12 18	23	22 37	0
16 ..	10	4	5	2	6	8	6	8	7	4	3	6	5·6	0 41	16	3 52	0
17 ..	7	7	7	8	7	3	9	12	14	11	12	11	9·5	23 15	20	10 30	1
18 ..	14	14	11	13	15	16	16	17	16	12	7	9	13·6	13 25	26	21 7	4
19 ..	9	6	4	5	10	7	10	5	10	8	4	7	6·9	0 9	20	14 6	2
20 ..	5	7	8	8	7	7	7	7	9	6	4	5	6·6	12 11	20	14 6	1
21 ..	5	6	6	4	5	6	6	7	7	4	1	10	6·1	19 12	18	21 0	0
22 ..	6	5	6	5	5	7	5	10	6	5	0	0	5·1	14 29	14	22 13	0
23 ..	4	6	9	10	6	9	4	5	6	6	2	1	6·0	11 4	13	21 17	1
24 ..	3	3	5	4	4	5	5	6	8	8	4	1	4·8	17 24	15	0 21	1
25 ..	1	3	3	6	3	7	4	6	7	9	5	3	4·8	7 16	15	8 3	0
26 ..	2	3	4	4	5	6	8	9	7	6	6	6	5·7	15 50	17	0 2	2
27 ..	6	6	5	4	3	4	5	6	7	5	5	3	5·2	11 45	11	8 28	1
28 ..	5	7	6	6	5	4	7	7	7	6	3	2	5·6	12 37	11	10 52	1
29 ..	3	1	10	4	4	3	2	5	6	3	1	1	3·7	5 6	13	2 50	0
30 ..	1	1	2	4	4	2	7	8	9	10	6	5	5·4	18 33	19	2 20	0
Mean ..	6·9	6·8	7·4	7·1	7·3	7·0	7·4	8·3	8·4	7·7	6·2	6·0	7·4	..	..	..	..

October.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
														H. M.		H. M.	
1 ..	4	4	4	5	4	3	5	8	8	9	4	4	5·2	15 1	14	9 57	0
2 ..	3	3	3	5	3	1	4	6	5	5	4	6	4·3	17 17	10	8 47	0
3 ..	2	3	3	3	5	4	3	5	7	8	6	4	4·5	18 45	12	7 31	0
4 ..	1	2	3	2	4	3	6	7	7	7	3	3	4·1	15 1	11	9 50	0
5 ..	0	4	0	2	5	3	4	5	9	4	6	3	4·1	16 43	28	0 10	0
6 ..	2	3	4	5	4	3	6	9	9	7	4	10	5·1	22 43	16	1 48	0
7 ..	1	3	7	3	6	5	6	10	11	11	8	6	6·4	17 29	21	0 48	0
8 ..	7	8	5	6	5	1	6	8	12	13	8	4	7·1	17 39	21	11 5	1
9 ..	4	6	5	9	5	7	7	7	5	5	5	11	6·5	16 6	17	16 46	0
10 ..	14	10	7	5	8	12	11	6	4	4	7	5	7·7	0 13	20	16 40	0
11 ..	4	6	4	4	5	3	4	5	6	8	7	7	5·5	18 32	16	11 31	1
12 ..	8	6	2	5	5	6	6	4	5	2	1	1	4·2	8 0	12	1 29	0
13 ..	5	4	4	3	4	4	8	9	9	11	9	7	6·5	19 12	17	9 43	0
14 ..	1	2	3	2	2	6	8	12	11	8	9	7	6·2	16 22	19	0 20	0
15 ..	7	6	4	3	4	2	8	10	10	8	5	5	5·8	14 28	15	10 24	0
16 ..	4	2	5	6	6	4	5	8	8	7	7	5	5·5	14 17	14	1 35	1
17 ..	2	4	3	4	4	7	10	12	12	9	5	3	6·4	15 12	20	9 12	1
18 ..	2	0	1	2	2	3	2	5	4	4	3	2	3·1	19 37	10	1 23	0
19 ..	4	4	4	4	4	1	3	6	5	4	4	1	3·9	16 43	11	5 10	0
20 ..	0	3	7	10	7	2	2	7	7	4	5	4	5·2	6 19	13	0 1	0
21 ..	3	1	2	6	5	4	6	8	10	9	4	3	5·3	17 58	15	3 55	0
22 ..	5	8	8	3	4	4	3	5	7	7	4	7	5·0	3 0	14	11 50	0
23 ..	4	4	3	8	8	3	1	7	7	11	5	1	5·9	18 35	17	2 11	0
24 ..	4	4	4	4	7	4	1	6	7	7	7	3	5·0	18 55	14	12 54	0
25 ..	0	3	4	4	6	5	6	8	9	10	7	6	5·8	17 37	16	0 7	0
26 ..	4	4	6	4	5	4	6	7	8	9	4	3	5·7	3 31	14	11 26	0
27 ..	4	3	3	3	6	4	3	6	8	13	11	7	6·3	19 49	16	6 44	0
28 ..	7	10	7	9	7	8	8	8	7	8	9	9	8·3	1 4	15	9 53	2
29 ..	7	10	10	7	8	7	7	6	7	7	3	3	6·8	3 31	15	20 27	1
30 ..	6	7	8	10	12	11	7	3	7	8	6	4	7·7	8 11	16	13 34	2
31 ..	4	4	10	8	9	10	6	4	5	5	9	3	6·8	4 19	14	2 12	2
Mean ..	4·0	4·5	4·6	5·0	5·5	4·6	5·4	7·0	7·6	7·5	5·8	4·7	5·7	..	..	..	..

The daily means are derived from 24 hourly values.

The velocity at any hour represents the movement of wind in one hour from that hour to the next hour.

Wind Velocity (in miles per hour), 1921.

November.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
														H. M.		H. M.	
1 ..	2	4	8	8	8	5	3	6	7	7	3	3	5·6	8 8	11	0 43	0
2 ..	2	8	7	7	4	5	2	10	3	3	2	2	4·5	13 52	15	16 42	0
3 ..	4	4	6	3	6	11	12	9	8	2	7	6	6·4	9 39	16	19 10	0
4 ..	4	3	7	8	3	1	1	8	7	7	6	2	4·9	19 32	13	13 1	0
5 ..	2	3	2	2	5	3	6	8	7	4	5	2	4·3	14 17	11	5 18	0
6 ..	3	4	1	1	3	3	7	7	9	9	4	4	4·7	16 50	14	5 19	0
7 ..	1	1	1	0	4	4	8	9	9	10	7	3	4·9	13 52	14	0 45	0
8 ..	1	1	3	3	3	1	5	5	5	4	2	3	3·5	13 57	9	0 5	0
9 ..	4	7	4	6	4	2	5	7	9	10	7	3	5·8	18 42	15	11 12	1
10 ..	4	9	10	11	11	2	3	7	8	5	6	5	6·7	7 8	15	11 7	1
11 ..	3	4	5	9	6	3	4	6	6	10	6	2	5·7	17 17	15	22 34	1
12 ..	4	9	10	7	11	5	7	4	6	7	6	3	7·0	8 36	15	14 54	1
13 ..	1	4	6	9	9	6	4	7	7	6	3	4	5·8	7 9	13	21 0	0
14 ..	3	4	6	6	5	2	1	7	6	6	5	3	4·8	19 9	10	12 19	0
15 ..	2	3	7	6	10	5	1	5	6	7	6	4	5·5	19 13	14	13 6	1
16 ..	5	5	7	7	6	2	2	7	7	8	3	2	5·3	18 15	12	12 32	0
17 ..	3	3	7	8	8	5	2	5	6	4	4	2	4·7	5 38	11	1 35	1
18 ..	2	4	5	5	4	2	4	5	6	10	6	9	5·1	18 25	15	1 35	1
19 ..	6	4	2	6	5	3	3	5	6	6	6	5	4·8	15 54	9	11 55	0
20 ..	3	5	6	9	10	4	3	5	6	10	6	3	6·0	18 30	15	13 28	1
21 ..	4	7	7	7	9	3	5	9	11	12	9	5	7·1	16 41	16	10 22	1
22 ..	4	7	7	5	4	1	4	7	9	10	7	4	5·9	18 12	13	11 52	0
23 ..	6	3	3	6	3	3	4	6	6	4	3	3	4·2	14 53	9	11 30	0
24 ..	2	4	5	6	6	3	2	6	4	5	3	5	4·5	7 2	9	0 36	0
25 ..	4	6	7	7	6	3	2	5	4	3	3	4	4·6	5 5	10	12 21	1
26 ..	6	5	7	10	9	3	3	5	7	5	2	3	5·2	6 7	12	11 58	1
27 ..	3	4	4	6	6	5	2	5	6	6	4	3	4·5	17 56	9	12 15	0
28 ..	2	4	7	9	10	7	2	5	6	3	3	4	5·4	8 11	13	0 16	1
29 ..	4	5	4	5	7	4	2	6	5	6	3	3	4·5	8 8	9	11 43	0
30 ..	4	7	5	8	8	4	2	4	7	7	8	4	5·4	20 0	11	12 47	1
Mean ..	3·2	4·7	5·5	6·3	6·4	3·6	3·7	6·3	6·6	6·5	4·8	3·6	5·2	..	..	..	..

December.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Mag
														H. M.		H. M.	
1 ..	2	4	3	4	5	4	4	5	7	7	7	3	4·9	16 52	11	13 32	1
2 ..	3	7	9	10	9	7	3	4	7	9	6	4	6·6	17 48	13	12 55	1
3 ..	3	4	6	8	3	1	2	4	6	3	4	3	4·2	6 31	10	8 22	1
4 ..	4	5	7	8	9	6	2	4	6	4	2	1	4·8	7 24	13	20 53	1
5 ..	3	3	4	9	8	6	2	6	6	5	1	3	5·0	6 20	12	20 38	0
6 ..	4	2	7	10	10	6	3	6	8	10	5	4	6·4	7 3	15	1 12	2
7 ..	2	4	10	11	10	3	1	6	7	7	3	2	5·7	5 17	14	23 40	0
8 ..	1	4	6	7	9	6	2	1	4	7	7	1	4·7	5 44	11	0 1	0
9 ..	2	3	7	7	8	4	1	5	9	9	6	3	5·5	18 27	15	0 1	1
10 ..	5	7	9	8	10	9	4	7	10	9	8	3	7·5	16 32	15	22 56	1
11 ..	2	7	9	9	10	6	4	7	7	8	7	1	6·5	5 56	15	22 55	0
12 ..	7	7	7	7	7	4	4	7	9	9	9	4	6·8	16 0	15	12 27	1
13 ..	4	7	7	8	7	3	2	6	4	3	2	4	4·7	7 21	11	13 9	1
14 ..	2	2	3	4	5	5	1	7	6	8	9	3	4·8	15 18	14	1 13	0
15 ..	2	4	3	4	7	2	4	6	8	5	4	4	4·6	15 17	12	0 51	1
16 ..	3	4	8	4	6	6	1	5	10	10	6	2	5·5	18 47	16	1 32	0
17 ..	1	5	5	7	8	5	2	4	6	8	4	5	5·0	18 53	13	1 45	0
18 ..	6	4	6	4	7	6	2	4	5	7	6	2	4·9	18 39	11	23 17	1
19 ..	4	4	5	5	7	8	2	7	4	4	3	3	4·8	11 6	9	12 43	0
20 ..	4	5	5	6	6	3	5	7	7	7	4	3	5·2	15 7	11	11 37	0
21 ..	2	4	4	4	5	5	10	10	11	6	7	3	6·1	13 43	17	0 36	0
22 ..	4	5	5	4	4	5	10	13	12	11	10	4	7·7	15 21	20	8 42	1
23 ..	4	4	4	4	5	9	10	10	11	13	11	6	7·5	18 37	17	9 43	1
24 ..	4	4	3	4	6	7	11	14	13	15	8	6	8·0	15 45	20	8 25	1
25 ..	2	2	4	4	7	6	5	8	12	12	11	5	6·5	17 53	18	2 16	1
26 ..	4	2	3	5	4	2	4	6	7	11	6	4	4·9	18 49	16	11 19	0
27 ..	2	5	8	11	8	7	4	6	7	6	4	3	6·0	8 30	14	0 7	0
28 ..	4	3	5	7	10	6	3	6	5	5	2	2	5·3	8 32	13	22 34	1
29 ..	3	2	5	5	5	3	7	7	7	7	8	4	5·5	19 33	13	0 50	1
30 ..	5	5	7	4	2	6	7	8	12	9	9	4	6·5	16 21	18	9 10	0
31 ..	3	4	4	4	4	12	12	10	10	9	10	4	7·1	12 32	20	3 17	1
Mean ..	3·2	4·3	5·7	6·3	6·8	5·4	4·2	6·6	7·8	7·8	6·1	3·3	5·8	..	..	..	..

The daily means are derived from 24 hourly values.

The velocity at any hour represents the movement of wind in one hour between that hour to the next hour.

Direction of wind, 1921.

January.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean direction.
1 ..	E	ENE	NNE	NNE	ENE	ENE	ENE	NW	NNW	NNW	NNW	N	N
2 ..	NE	NE	NNE	E	E	NNW	WNW	NW	NW	NNW	N	N	N
3 ..	ESE	ESE	NE	ENE	E	ENE	NW	W	NW	NNW	NNW	N	N
4 ..	N	N	ENE	ENE	ENE	ENE	ENE	NW	NW	NNW	NNW	NNE	NNE
5 ..	NNE	NE	ENE	ENE	E	E	E	WNW	NW	NNW	NNE	NNE	NNE
6 ..	N	N	NE	E	ENE	ENE	NE	NW	NW	NNW	N	N	N
7 ..	NE	NE	ENE	ENE	ENE	ENE	NW	NW	NW	NNW	NNW	N	N
8 ..	N	N	N	NE	ENE	ENE	NW	NW	NNW	NNW	NNE	NNE	NNW
9 ..	NNE	NNE	NNE	NNE	E	ENE	NW	NW	NNW	NNW	NNW	N	N
10 ..	N	N	NE	NE	ENE	ESE	ESE	WNW	WNW	NW	NNE	NNW	N
11 ..	ENE	ENE	NNE	NNE	ENE	E	E	W	WNW	NW	NNW	NNE	N
12 ..	ENE	NNW	NE	NE	ENE	NNW	NW	NW	NNW	NNW	N	N	N
13 ..	NE	NNW	N	NNE	NNE	NNW	NW	NW	NNW	NNW	NNW	NNE	NNW
14 ..	N	NNE	NNE	NNE	NNE	ENE	NNW	NNW	NNW	NNW	NNW	N	N
15 ..	N	N	NNE	NE	NE	NNW	NW	NW	NNW	NNW	NNW	NNW	NNW
16 ..	NNE	NNE	NNE	NNE	N	NNW	NW	NNW	NNW	NNW	N	N	NNW
17 ..	N	N	N	NNE	N	NW	NNW	NNW	NNW	NNW	NNW	N	NNW
18 ..	N	N	NNW	N	NNW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW
19 ..	NNW	NNW	N	NNW	ENE	ENE	WNW	NW	WNW	NW	N	N	NNW
20 ..	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21 ..	WNW	NW	NNW	NNE	NNE	NNW	NW	NW	NW	NNW	N	NNE	NNW
22 ..	NNE	NNE	NNE	NE	ENE	ENE	ENE	WNW	NW	NNW	NNW	NNE	N
23 ..	NNE	NNE	N	NNE	NNE	NE	NW	NNW	NNW	NNW	NNW	NNE	N
24 ..	NNE	NNE	NNE	NNE	ENE	NE	NE	NW	NNW	NNW	NNW	NNW	N
25 ..	NE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	NNW	NNW	NNW	N	NNE
26 ..	N	ENE	ENE	ENE	ENE	ENE	ENE	W	WNW	NNW	NNW	NE	NNE
27 ..	NE	ENE	ENE	E	ESE	ESE	WNW	W	WNW	NNW	NNE	NE	N
28 ..	NE	NE	ENE	ENE	ENE	ENE	WNW	NW	NNW	NNW	NNW	NNE	N
29 ..	NE	NE	NNE	NNE	ENE	NNW	NW	NNW	NNW	NNW	NNW	NNE	NNW
30 ..	NNE	NNW	N	N	NE	WNW	NW	NW	NNW	NNW	N	NE	NNW
31 ..	NNE	NW	NNW	NNW	NNE	ENE	NW	NW	NW	NNW	NNW	N	NNW
Mean direction.	NNE	N	NNE	NE	ENE	NNE	NNW	NW	NW	NNW	NNW	N	N

February.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean direction.
1 ..	N	N	N	NE	NE	ENE	NW	NW	NW	NNW	NNW	NNE	NNW
2 ..	NNE	N	N	N	N	NNW	NW	NW	NNW	NNW	NNW	N	NNW
3 ..	N	N	N	N	ENE	ENE	NW	NW	NW	NW	NW	N	NNW
4 ..	NE	NE	ENE	NNE	NNE	N	NNW	NNW	NW	NW	NW	NW	NNW
5 ..	NNW	NE	ENE	E	E	ENE	NW	NW	NW	NW	NNW	NNW	N
6 ..	NNE	NNE	NNE	NE	ENE	ENE	NW	NW	NW	NNW	NNW	NNW	NNW
7 ..	NNW	NNW	NE	ENE	ENE	NW	NW	NW	NW	NW	NW	NW	NNW
8 ..	NW	NE	NE	ENE	ENE	E	NW	NW	NNW	NNW	NNW	NNE	N
9 ..	NNE	NNE	NNE	NNE	NNE	ENE	WNW	NW	NW	NNW	NNW	N	NNW
10 ..	N	NNW	ENE	ENE	E	ENE	WNW	NW	NNW	NW	NNW	NNW	N
11 ..	NNW	NNW	ESE	ESE	ESE	SSE	SSW	WSW	WSW	W	SSE	SSE	SSE
12 ..	SSE	SSE	SE	SE	SSE	W	W	W	W	W	W	SW	SW
13 ..	W	W	W	W	WNW	WNW	WNW	WNW	NW	NNW	N	N	NW
14 ..	N	NNW	NNE	NNE	NNE	NNW	NW	NW	NNW	NNW	NNW	N	NNW
15 ..	NNE	NNE	E	E	ENE	ENE	ENE	ENE	NNW	NNW	NNW	NNW	N
16 ..	NE	ENE	ENE	ENE	ENE	ENE	ESE	ESE	NNW	NNW	NNW	NNW	NE
17 ..	SSW	SSE	ESE	ENE	NE	WNW	WNW	NW	NNW	NW	NNW	N	NNW
18 ..	N	NNE	ENE	ENE	ENE	ENE	NW	NW	NW	NNW	N	NNE	N
19 ..	NNW	NNW	N	N	NNE	NW	NW	WNW	NW	NW	NNW	NNW	NNW
20 ..	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21 ..	N	N	N	ENE	NNE	ENE	WNW	WNW	NW	NW	NW	NNW	NNW
22 ..	NNE	N	NNE	NNE	ENE	ENE	WNW	WNW	NW	NW	NNW	N	NNW
23 ..	N	N	NNE	NNE	ENE	WNW	WNW	NW	NW	NNW	NNW	NNW	NNW
24 ..	NNW	NNW	N	NNE	ENE	WNW	NW	NW	NW	NNW	NNE	NNE	NNW
25 ..	NNE	NNE	NNE	NNE	ESE	ESE	W	WNW	W	W	W	SSW	WSW
26 ..	SSW	SSW	NW	NE	ESE	ESE	WNW	WNW	WNW	WNW	WNW	S	W
27 ..	WSW	WNW	NW	NW	ENE	WNW	NW	NW	NW	NNW	NW	NNW	NW
28 ..	N	N	N	NNE	NNE	NW	NW	NW	NW	NW	NW	NNW	NNW
Mean direction.	N	N	NNE	NE	ENE	NNE	NW	NW	NW	NW	NNW	NNW	NNW

The daily means are derived from 24 hourly values.

The direction at any hour represents the prevailing direction between that hour and the succeeding hour.

Direction of wind, 1921.

March.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean direction.
1	NNW	NNE	NNE	NNE	N	NW	WNW	NW	NNW	NNW	NNW	N	NNW
2	NNE	NNE	NNE	NNE	ENE	ENE	NW	NW	NW	NNW	N	N	NNW
3	N	NE	NE	NNE	ENE	NW	NNW	NNW	NNW	NNW	NNW	NNE	N
4	NNW	NNW	NNW	NNE	ENE	ENE	NW	NW	NNW	NW	NNW	NNW	NNW
5	NNE	NNW	NNW	SSW	SSE	SSW	SSW	W	W	W	SSW	SSW	SW
6	SSE	SE	SE	NNW	N	SSW	SW	WSW	W	WNW	WNW	Calm.	SW
7	WNW	WNW	NW	NW	SSE	SSW	WSW	W	WNW	WNW	WNW	WNW	W
8	NW	ENE	E	E	ENE	WNW	WNW	WNW	WNW	WNW	WNW	WNW	NW
9	S	S	SSE	SSE	SSE	SSE	SW	SW	SW	SW	SW	SW	SSW
10	SSW	SSW	WSW	WSW	SSE	SSE	WSW	WSW	W	W	W	W	SW
11	W	W	W	ENE	ENE	ENE	WNW	WNW	NW	NW	NW	NW	NW
12	NNW	ENE	ENE	ENE	ENE	WNW	WNW	WNW	NW	NW	NW	NNW	NNW
13	NNW	NNE	NNE	NNE	NNE	NW	NW	NW	NW	NNW	NNW	NNW	NNW
14	NNW	NNW	NE	NE	NNW	NW	NW	NW	NW	NNW	NNW	NNE	NNW
15	NNW	NNW	NNW	NE	E	SSE	W	W	WNW	WNW	SSE	SSE	NW
16	SSE	WSW	NW	ESE	ESE	ENE	WNW	WNW	WNW	NW	NW	NW	WNW
17	NW	NW	SE	ESE	SSE	WSW	WNW	WNW	NW	NW	NNW	N	WNW
18	NW	NNE	NNE	NNE	NNE	ESE	WNW	WNW	WNW	WNW	WNW	WNW	NW
19	WNW	WNW	NE	ENE	ENE	ESE	W	W	W	W	W	W	W
20	W	NW	N	ESE	ESE	ESE	WSW	W	W	W	W	W	W
21	W	NW	.	NNE	ENE	NW	WNW	NW	NW	NW	NW	NNW	NW
22	NNW	NE	NE	NE	N	NW	NW	NW	NW	WNW	NW	NW	NNW
23	NW	NNW	NNE	NNE	NNE	NNW	NW	NW	NW	NW	NW	*	*
24	*	*	*	*	*	NNW	NW	NW	NW	NW	NW	NW	*
25	NNW	N	N	N	NNE	NNW	NNW	NW	NNW	NNW	NNW	NNW	NNW
26	NNW	NNW	NNE	NNE	ENE	NW	NW	NW	NW	NNW	NNE	ESE	NNW
27	NW	NNW	NNW	NNW	SSE	SSW	WSW	W	WNW	WNW	SSW	WSW	W
28	NW	NW	ESE	ESE	SSE	WSW	W	NW	NW	NW	NW	NW	NW
29	NNW	NNW	NNE	NNE	ESE	WSW	W	WNW	NW	NW	NW	NW	NW
30	NNW	NNE	NNW	NE	NNE	WNW	WNW	NW	WNW	WNW	WNW	NW	NW
31	NNW	NE	ENE	E	N	NW	WNW	NW	NW	NW	NW	NNW	NNW
Mean direction.	NNW	N	NNE	ENE	E	WNW	WNW	WNW	NW	NW	NW	NW	NW

April.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean direction.
1	NNW	NNW	NNE	N	ENE	WNW	WNW	W	W	WSW	SSW	SSW	W
2	SSE	SSE	SSW	SSW	SSE	SSE	WSW	W	WNW	NW	NW	SW	WSW
3	SW	SSW	SSW	SSW	ESE	ESE	WSW	W	WNW	WNW	WSW	WNW	WSW
4	SW	NW	NW	SSW	SSE	SSW	WSW	WSW	W	WSW	SSW	WSW	WSW
5	SSW	SSE	SSE	SSE	S	SSW	SW	SW	WSW	WSW	W	WSW	SSW
6	WSW	WSW	ENE	ENE	E	WSW	W	W	WNW	WNW	WNW	WNW	W
7	WNW	SSE	SE	SE	SSE	W	WSW	W	W	WNW	S	SSE	SSW
8	WNW	NW	NW	NW	NNW	SSE	W	W	WNW	NW	NNW	WNW	WNW
9	NW	NNE	NNE	NNE	ENE	W	W	W	W	W	W	W	WNW
10	NW	N	NNE	ENE	ENE	WNW	WNW	WNW	WNW	WNW	NNW	NNW	NW
11	NW	NW	NW	NW	NW	WSW	WSW	W	WSW	SSW	SSW	WSW	WSW
12	SSW	S	S	S	SE	SSW	SW	WSW	WSW	WSW	S	SSW	SSW
13	W	WNW	ESE	SSE	SSE	WNW	WSW	WSW	W	WNW	NW	NW	W
14	NW	NW	WSW	SE	SSE	SSW	WSW	W	WNW	WNW	NW	NW	W
15	SSW	SSW	WSW	WSW	ESE	SSW	WSW	W	W	WNW	WNW	WNW	WSW
16	Calm.	SSW	S	SE	WSW	WSW	W	W	WNW	WNW	NW	NW	W
17	NW	SSW	SSW	SE	S	SW	WSW	W	WNW	WNW	WNW	WNW	WSW
18	WNW	Calm.	WNW	SSE	SSE	WSW	W	WNW	W	WNW	NW	NW	W
19	N	NNE	NNE	NNE	NNE	WNW	WNW	WNW	NW	NW	NW	NNW	NW
20	NNE	NNE	NNE	NNE	NNW	NW	NW	WNW	NW	NW	NW	NNW	NNW
21	NNW	NNE	NNE	NNE	NNE	W	WNW	WNW	WNW	WNW	NW	NW	NW
22	NNW	NNE	NNE	NNE	NW	W	W	W	W	WNW	NW	NNW	WNW
23	NW	NNW	NNE	NNE	NNW	W	WNW	WNW	WNW	WNW	NW	NW	NW
24	NNW	Calm.	SSE	SSE	W	WNW	WNW	WNW	NW	NW	NNW	NNW	NW
25	NW	NW	SSE	SSE	WSW	WSW	W	WNW	WNW	NW	NW	NW	WNW
26	NNW	SE	SSE	SSW	W	W	WNW	W	WNW	WNW	WNW	NW	WNW
27	NNW	NNW	NNE	NNE	N	WNW	WNW	WNW	WNW	WNW	NW	NW	NW
28	NNW	NNE	N	N	NNW	WNW	WNW	NW	NW	WNW	NW	NW	NW
29	NNW	N	NNE	NNE	NNW	NW	NW	NW	WNW	WNW	NW	NW	NW
30	NNW	N	ENE	ENE	WNW	WNW	WNW	WNW	NW	NW	NW	WNW	NW
Mean direction.	NW	NNW	E	ESE	SE	W	W	W	WNW	WNW	WNW	NW	WNW

* Records lost owing to the stoppage of driving clock.
The daily means are derived from 24 hourly values.
The direction at any hour represents the prevailing direction between that hour and the succeeding hour.

Direction of wind, 1921.

May.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean direction.
1 ..	WSW	WSW	WSW	Calm.	SSE	SW	WSW	W	W	W	SSW	SSW	WSW
2 ..	SSW	SSW	SSW	SSW	SSW	SW	WSW	WSW	WSW	W	SSW	WSW	SW
3 ..	WSW	WSW	SSW	SSW	SSW	SSW	SSW	SW	SW	SW	SW	WSW	SW
4 ..	WSW	WSW	WSW	WSW	WSW	SSW	SSW	SSW	SW	WSW	WSW	WSW	SW
5 ..	WSW	WSW	WSW	SSE	SSW	WSW	WSW	W	WNW	WNW	WNW	NW	W
6 ..	NW	N	NNE	NE	NE	WSW	W	W	W	WNW	WNW	NW	WNW
7 ..	NW	NW	Calm.	NW	W	WSW	W	W	W	W	W	WNW	W
8 ..	WNW	WNW	N	N	ENE	WSW	WNW	WNW	WNW	WNW	WNW	WNW	WNW
9 ..	NW	NNW	N	N	NW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW
10 ..	NW	NNW	NNW	NNE	ENE	NW	WNW	WNW	W	WNW	WNW	WNW	WNW
11 ..	NNW	NNE	NNE	NE	NNW	NW	WNW	WNW	WNW	WNW	WNW	NW	NW
12 ..	NNW	NNW	N	NNE	N	WNW	W	WSW	WSW	SW	WSW	Calm.	WNW
13 ..	SW	S	S	S	SW	WSW	W	WNW	WNW	WNW	WNW	WNW	W
14 ..	WNW	SSW	SSW	SSE	WSW	WSW	W	W	WNW	WNW	NW	NW	W
15 ..	NW	NW	NW	WSW	WSW	WSW	W	W	W	WNW	WNW	WNW	W
16 ..	NW	NW	NW	NW	NW	WNW	W	WNW	WNW	WNW	WNW	WNW	WNW
17 ..	WNW	WNW	WNW	WNW	WNW	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW
18 ..	WNW	WNW	Calm.	S	S	W	W	W	W	W	W	WNW	W
19 ..	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	WNW
20 ..	W	W	W	W	W	W	W	W	W	W	W	W	W
21 ..	W	W	WNW	W	WSW	W	W	W	W	WNW	WNW	W	W
22 ..	W	WNW	W	W	W	W	W	W	W	W	W	W	W
23 ..	W	W	W	WNW	W	W	W	W	W	W	WNW	WNW	W
24 ..	W	W	W	WNW	WNW	WNW	WNW	WNW	W	WNW	W	W	W
25 ..	W	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	WNW
26 ..	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW
27 ..	WNW	WNW	WNW	WNW	NW	WNW	WNW	WNW	WNW	WNW	W	W	WNW
28 ..	W	W	W	WNW	WNW	WNW	WNW	W	WNW	WNW	WNW	WNW	WNW
29 ..	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	W	WNW
30 ..	W	W	W	W	W	W	WSW	W	W	W	W	W	W
31 ..	W	W	WSW	W	SSW	WSW	W	W	W	WSW	WSW	WSW	WSW
Mean direction.	WNW	WNW	WNW	WNW	WNW	W	W	W	W	WNW	W	WNW	W

June.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean direction.
1 ..	SW	SW	SSW	SSW	S	SSW	WSW	WSW	WSW	SW	WSW	SW	SW
2 ..	SW	SW	SSW	SSW	SW	SW	WSW	W	W	WSW	WSW	WSW	WSW
3 ..	WSW	W	W	WSW	SSW	S	S	SSW	SW	SW	SSW	SSE	SSW
4 ..	SE	SSW	SSW	SSE	S	S	SSW	SSW	SSW	SW	SSW	SSW	S
5 ..	SSW	SW	SW	SSW	SSW	SSW	SW	SW	WSW	WSW	SW	SW	SW
6 ..	SW	SW	W	W	SW	WSW	WSW	WSW	W	WSW	WSW	W	WSW
7 ..	W	W	W	WNW	WNW	WNW	WNW	WNW	WNW	W	W	WNW	WNW
8 ..	W	WNW	WNW	WNW	WNW	W	W	W	W	W	W	WSW	W
9 ..	WSW	WSW	Calm.	SSE	SSE	SSW	SSW	SW	SSW	SSW	S	SSE	SSW
10 ..	SSE	SE	SE	SE	SSE	SSW	SSW	SSW	WSW	SW	W	W	S
11 ..	WNW	W	WNW	ENE	SSE	SSW	W	W	WSW	SSW	SSW	WNW	W
12 ..	WSW	SW	SW	SE	SE	WSW	NNW	S	SW	SSW	SSW	SSW	SSW
13 ..	SSE	SSE	SSW	ESE	SSE	SSE	S	S	S	SSW	SSW	SSW	SSE
14 ..	SSW	W	W	SE	SW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SSW
15 ..	SSW	WSW	ESE	ESE	SSE	S	SSW	SSW	SSW	SSE	SW	SSW	S
16 ..	SSE	SW	SW	SE	SE	SSW	S	S	SSW	SSW	SW	SW	S
17 ..	WSW	W	WSW	WSW	WSW	SW	WSW	W	SSW	S	SSE	W	SW
18 ..	SW	WSW	WSW	WSW	SSW	WSW	SSW	WSW	WSW	WSW	WSW	SW	WSW
19 ..	WSW	W	W	W	WNW	NW	WNW	W	WSW	WSW	W	WSW	W
20 ..	W	W	W	W	WNW	N	WSW	SSE	SSW	**	SSW	SSW	WSW
21 ..	W	W	W	W	W	W	W	W	W	WNW	W	W	W
22 ..	WSW	WSW	WSW	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
23 ..	WSW	WSW	WSW	SW	WSW	WSW	WSW	SW	WSW	WSW	SW	WSW	WSW
24 ..	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	SW	WSW	SW	WSW
25 ..	WSW	WSW	W	SW	WSW	W	W	W	W	W	W	W	W
26 ..	WSW	W	W	W	W	W	W	W	W	W	W	W	W
27 ..	W	W	W	W	W	W	W	WNW	WNW	WNW	WNW	WNW	W
28 ..	WNW	W	W	WNW	WNW	W	WNW	W	WNW	W	WNW	W	WNW
29 ..	W	WNW	W	W	W	W	W	W	W	W	W	WSW	W
30 ..	WSW	SW	WSW	SW	S	SSW	SW	SW	WSW	WSW	SW	SW	SW
Mean direction.	SW	WSW	WSW	SSW	SW	SW	WSW	WSW	WSW	SW	WSW	WSW	SW

The daily means are derived from 24 hourly values. ** Variable.
The direction at any hour represents the prevailing direction between that hour and the succeeding hour.

Direction of wind, 1921.

July.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean direction.
1 ..	SSE	SSE	SSE	SW	WSW	SW	SW	W	W	WSW	WSW	WSW	SSW
2 ..	WSW	WSW	WSW	W	WSW	WSW	WSW	WSW	W	W	WNW	W	W
3 ..	WSW	WSW	WSW	W	WSW	WSW	WSW	W	W	W	WSW	WSW	WSW
4 ..	WSW	W	WSW	WSW	WSW	W	W	WSW	W	W	W	W	WSW
5 ..	W	W	WNW	W	W	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW
6 ..	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW
7 ..	WNW	WNW	WNW	WNW	WNW	NNW	WNW	WNW	W	NW	S	SE	WNW
8 ..	SSE	SSE	SSE	WNW	WSW	WSW	WSW	SW	W	WNW	WNW	WNW	SW
9 ..	SSW	SSE	SSE	SSE	S	S	WSW	WSW	WSW	WSW	WSW	SW	SSW
10 ..	SSW	SSW	SW	SSW	SW	WSW	WSW	WSW	WSW	WSW	SSW	SSE	SW
11 ..	S	S	S	W	SSE	S	S	WNW	SSW	SSW	SE	ENE	S
12 ..	SSE	SSE	S	S	SE	SSE	SSE	ESE	SSE	WNW	SE	SSE	SSE
13 ..	WSW	SSW	ESE	SSE	SSE	S	SW	W	W	W	W	S	SSW
14 ..	W	WSW	SSW	SSW	S	SSW	SSW	SSW	WSW	W	W	W	WSW
15 ..	WNW	ENE	SSE	W	SSW	S	WSW	W	W	SW	SSW	WSW	SW
16 ..	WSW	SSE	SSW	SSW	SSE	S	SSW	SSW	SSW	SSW	SSW	WSW	S
17 ..	SSE	SSE	SSE	S	SSE	S	WSW	WSW	W	WNW	WNW	WNW	SSW
18 ..	WNW	SSE	S	WSW	NNW	WNW	WNW	SSW	W	WNW	WNW	WNW	W
19 ..	NW	WSW	WSW	WSW	SW	SSW	SSW	SSW	WNW	WNW	SW	W	WSW
20 ..	W	SSW	WNW	SSE	WNW	SSW	WSW	WSW	WSW	SSW	W	SSW	SW
21 ..	WSW	SSE	S	W	W	W	W	W	W	W	WSW	SW	WSW
22 ..	WSW	WSW	WSW	W	WSW	WSW	WSW	WSW	W	W	WSW	W	WSW
23 ..	W	W	W	W	WSW	W	WSW	W	W	W	W	WSW	W
24 ..	WSW	WSW	W	W	WSW	SW	WSW	WSW	SW	W	W	W	WSW
25 ..	WSW	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
26 ..	W	WSW	W	SW	WSW	WSW	WSW	W	W	W	WSW	WSW	WSW
27 ..	WSW	WSW	WSW	WSW	W	W	W	WSW	W	WSW	WSW	WSW	WSW
28 ..	W	W	W	W	W	WSW	W	WSW	W	W	W	W	W
29 ..	W	WSW	W	WSW	W	W	W	WSW	W	W	W	W	W
30 ..	W	W	W	W	W	W	W	W	W	W	W	WSW	W
31 ..	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	WSW
Mean direction.	WSW	SW	SW	WSW	WSW	WSW	WSW	WSW	W	W	WSW	WSW	WSW

August.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean direction.
1 ..	WSW	WSW	W	WSW	WSW	WSW	WSW	WSW	W	WSW	W	W	WSW
2 ..	WSW	W	W	W	WSW	WSW	WSW	W	SW	SW	W	W	W
3 ..	W	W	W	W	W	WSW	WSW	W	W	W	WSW	WSW	W
4 ..	W	W	W	W	W	WSW	WSW	WSW	WSW	WSW	WSW	SW	WSW
5 ..	WSW	SW	WSW	W	WSW	WSW	WSW	WSW	W	WSW	WSW	W	WSW
6 ..	W	W	W	W	W	W	W	WSW	W	W	W	SW	W
7 ..	W	W	W	W	W	W	WSW	W	W	W	W	W	W
8 ..	W	W	W	WSW	W	W	W	WSW	W	W	W	W	W
9 ..	WSW	W	W	WNW	W	W	WNW	W	W	W	W	W	W
10 ..	W	W	W	NW	W	W	W	W	W	W	W	W	W
11 ..	W	W	W	W	WSW	W	W	W	W	W	W	W	W
12 ..	W	W	W	WSW	WSW	W	W	W	W	WSW	WSW	WSW	W
13 ..	WSW	WSW	WSW	WSW	SW	SW	SW	SW	SW	WSW	SW	WSW	WSW
14 ..	WSW	WSW	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	WSW
15 ..	W	WSW	WSW	WSW	WSW	SW	WSW	WSW	W	WSW	WSW	WSW	WSW
16 ..	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	SW	SW	SW	SW	WSW
17 ..	SW	WSW	WSW	WSW	SW	SW	SW	SW	SW	SW	SW	SSW	SW
18 ..	SW	SW	SW	WSW	WSW	SW	WSW	WSW	W	W	W	W	WSW
19 ..	WSW	W	W	W	W	W	WSW	W	W	W	W	W	W
20 ..	W	W	W	W	W	W	W	W	W	WSW	WSW	SSW	W
21 ..	SW	WSW	WSW	WSW	W	SW	SW	SSW	SW	SSW	SW	SSE	SW
22 ..	S	SSW	SSE	SSE	S	S	SW	WSW	W	W	WSW	S	SSW
23 ..	SSW	SW	SW	SW	SW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW
24 ..	WNW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
25 ..	SW	SSW	SW	SSE	S	W	WSW	W	W	WSW	WSW	WSW	WSW
26 ..	WSW	WSW	SW	SSW	WSW	SSW	SSW	W	W	W	WNW	WSW	WSW
27 ..	W	WSW	WSW	WSW	WSW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
28 ..	WSW	WSW	W	NW	NW	SSE	WSW	W	WSW	W	WNW	WNW	WSW
29 ..	WSW	WSW	WSW	WSW	WSW	WSW	W	WSW	WSW	WSW	WSW	WSW	WSW
30 ..	WSW	WSW	WSW	WSW	SW	WSW	WSW	WSW	W	WSW	WSW	WSW	WSW
31 ..	WSW	SW	SW	WSW	WSW	WSW	W	W	W	W	WSW	W	W
Mean direction.	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	WSW	WSW	WSW	WSW

The daily means are derived from 24 hourly values.
The direction at any hour represents the prevailing direction between that hour and the succeeding hour.

Direction of wind, 1921.

September.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean direction.
1 ..	W	WSW	W	WSW	W	WSW	WSW	W	WSW	SW	W	W	W
2 ..	W	WSW	W	W	W	W	W	W	W	W	W	W	W
3 ..	W	W	W	W	W	W	W	W	W	W	W	WSW	W
4 ..	WSW	SW	SW	WSW	WSW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
5 ..	WSW	W	WSW	WSW	SW	SW	W	WSW	W	WSW	SW	WSW	WSW
6 ..	WSW	SW	SW	SW	SW	WSW	W	SSW	W	WSW	W	WSW	WSW
7 ..	SW	SW	SW	SW	SSW	WSW	WSW	WSW	W	WSW	WSW	W	WSW
8 ..	WSW	WSW	WSW	WSW	WSW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW
9 ..	WSW	WSW	WSW	W	WSW	WSW	W	W	W	W	W	W	W
10 ..	W	W	W	W	W	W	W	W	WNW	W	WNW	WNW	W
11 ..	WNW	W	W	W	W	W	W	W	W	W	W	WNW	W
12 ..	W	W	W	W	W	WNW	WNW	W	W	W	W	WNW	W
13 ..	W	W	W	W	W	W	W	W	W	W	W	W	W
14 ..	W	W	W	W	W	W	W	W	WNW	WNW	WNW	W	W
15 ..	W	W	W	WNW	WNW	WNW	W	W	NW	W	WNW	S	W
16 ..	WNW	N W	NE	NNW	E	SE	NW	WNW	NW	WNW	WNW	WNW	NW
17 ..	WNW	WNW	WNW	NW	NNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW
18 ..	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW
19 ..	WNW	NW	WNW	WSW	W	WSW	W	WSW	W	WSW	W	W	W
20 ..	W	W	W	W	WSW	WSW	WSW	W	W	W	W	WSW	W
21 ..	W	W	W	W	W	W	W	WSW	WNW	WSW	NNW	SE	W
22 ..	SSE	SSE	SSE	ESE	ESE	SSW	SSW	WNW	WNW	WNW	Calm.	WNW	SSW
23 ..	SSW	SSE	SE	SE	SE	SSW	SW	WSW	W	WNW	WNW	WNW	S
24 ..	WNW	S	S	S	S	S	WSW	W	WNW	WNW	WNW	WNW	WSW
25 ..	WNW	WNW	ESE	SSE	SW	SSW	SW	SSW	W	W	WNW	WNW	WSW
26 ..	WNW	WSW	WSW	W	W	W	W	W	W	W	W	W	W
27 ..	W	W	WSW	WSW	WSW	WSW	W	W	W	W	W	W	W
28 ..	W	W	W	W	W	WSW	W	W	W	W	W	W	W
29 ..	WSW	WSW	SSE	SE	ESE	ESE	ESE	WNW	WNW	NW	NW	NW	SW
30 ..	ENE	ENE	ENE	ENE	ENE	ENE	NW	NW	NW	NNW	ENE	NE	N
Mean direction.	W	W	WSW	W	W	WSW	W	W	W	W	W	W	W

October.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean direction.
1 ..	NNE	NNE	NE	ENE	ENE	WNW	NW	NW	NNW	NNW	N	N	N
2 ..	N	ENE	ENE	ENE	ENE	ENE	NW	WNW	WNW	NW	NW	NNW	N
3 ..	N	ENE	ENE	NNE	ENE	ENE	NW	WNW	NW	NNW	N	N	N
4 ..	N	N	NNE	NNE	ENE	ENE	NW	NW	NW	NNW	NNW	NNW	NNW
5 ..	NNW	NNW	NNW	NNW	ENE	ENE	WNW	NW	NNW	SSE	SE	SE	NNE
6 ..	S	S	NE	ENE	ENE	NW	WNW	NW	NW	NNW	NNW	SE	NNW
7 ..	SSE	WNW	NW	E	E	ENE	NW	NW	NW	NNW	N	NNE	NNW
8 ..	NNW	NNW	NNE	ESE	ESE	ESE	NW	NW	NW	NNW	N	N	NNW
9 ..	NNE	NE	ENE	NE	NE	ENE	NE	NNW	NNE	NNW	NE	ESE	NE
10 ..	ESE	ENE	ENE	ENE	E	E	E	ENE	ENE	WNW	SSW	SSW	E
11 ..	S	SSE	SE	SE	SE	SE	SSW	SW	SSW	S	SE	SE	SSE
12 ..	SE	ESE	ESE	ESE	SSW	SW	SSW	WSW	W	W	W	W	S
13 ..	SSE	SSE	SE	SE	E	ENE	NW	NW	NW	NW	NNW	NNW	NNW
14 ..	N	N	N	NNE	ENE	NW	NW	NW	NW	NW	NW	NW	NW
15 ..	NW	NW	NNW	NNE	ENE	NW	WNW	NW	NW	NW	NW	NW	NW
16 ..	NW	NW	ENE	ENE	ENE	E	NW	WNW	WNW	NNW	NNW	N	NNW
17 ..	N	NE	ENE	NNE	ENE	NNW	NW	NW	NNW	NNW	NNW	NNW	NNW
18 ..	NNW	NNW	NNW	NE	ESE	ESE	W	W	WNW	NW	N	N	NNW
19 ..	ESE	ESE	ENE	ENE	ENE	ENE	NNW	WNW	NW	NNW	NNW	NNW	NNE
20 ..	NNW	NNW	E	E	ENE	E	E	WNW	NW	NW	NNW	N	NNE
21 ..	ENE	ENE	ENE	ENE	ENE	NNW	NW	NW	NW	NNW	N	NNE	N
22 ..	NE	NNW	N	ENE	ENE	ENE	ENE	WNW	WNW	NNW	NNE	ENE	N
23 ..	ENE	NNW	ENE	ESE	SE	ESE	ENE	WNW	NW	NNW	NNE	NNE	NNE
24 ..	NNE	ENE	ENE	ENE	ENE	E	E	WNW	WNW	NW	N	N	NNE
25 ..	NNE	NNE	ESE	ENE	ENE	ENE	NW	NW	NW	NNW	NNE	NNE	N
26 ..	NNE	NNW	NNE	N	E	ENE	NW	NW	NW	NNW	NNE	NNE	N
27 ..	NNE	NE	NNW	NE	ENE	ENE	ENE	WNW	NW	NNW	N	N	N
28 ..	ENE	ENE	NE	ENE	ENE	NE	NE	NE	NNE	N	NNE	NE	NE
29 ..	NE	ENE	ENE	NE	ENE	ENE	NE	NE	NNE	NNW	NNW	NE	NE
30 ..	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	NW	NNW	NNW	NNE	NE
31 ..	ESE	ENE	ENE	ENE	ENE	ENE	ENE	NE	NW	NNW	N	NNE	NE
Mean direction.	NE	NE	NE	ENE	E	ENE	NNW	NW	NW	NNW	N	NNE	N

The daily means are derived from 24 hourly values.

The direction at any hour represents the prevailing direction between that hour and the succeeding hour.

Direction of wind, 1921.

November.

Date	HOURS 0	2	4	6	8	10	12	14	16	18	20	22	Mean direction.
1 ..	NE	ENE	ENE	ENE	ENE	ESE	SSE	WNW	NW	NW	NW	NW	NE
2 ..	NW	ESE	SE	SE	E	NE	SE	ESE	ESE	WSW	WSW	NNW	ESE
3 ..	ENE	ENE	ENE	NE	ENE	ESE	SE	SE	E	S	ESE	ESE	ESE
4 ..	E	E	ESE	SE	ESE	ESE	ESE	NW	NW	NNW	N	N	NE
5 ..	ENE	ENE	ENE	ENE	ENE	NW	NW	WNW	WNW	NW	NNW	NNE	NNW
6 ..	NNE	ESE	ESE	NE	NNE	WNW	WNW	NW	NW	NNW	NNW	NNW	NNW
7 ..	Calm.	E	NNE	NE	ENE	NW	NW	NW	NNW	NNW	N	N	NNW
8 ..	NE	ESE	NE	E	E	E	W	W	WNW	NW	NNW	NNE	N
9 ..	ESE	SE	ESE	ESE	ESE	ENE	WNW	NW	NW	NNW	NNW	N	N
10 ..	E	E	E	E	E	SE	ENE	WNW	WNW	NW	NW	NNW	NE
11 ..	NNW	ESE	ENE	ENE	E	E	E	NW	NW	NNW	N	N	NNE
12 ..	NE	E	ESE	ESE	E	ENE	E	ENE	NW	NW	NW	NNW	ENE
13 ..	NNE	ESE	ESE	E	ENE	E	ESE	WNW	NW	WNW	WNW	NNE	ENE
14 ..	NNE	ENE	ENE	ENE	E	E	E	WNW	WNW	NW	NNW	N	NNE
15 ..	N	NNE	ENE	E	E	ESE	ESE	W	WNW	NW	NNW	NNE	NNE
16 ..	NNE	ENE	E	E	ESE	ESE	ESE	WNW	NW	NNW	N	N	NE
17 ..	N	E	E	ESE	ESE	E	SSE	WNW	WNW	WNW	NW	NNE	ENE
18 ..	NNE	ESE	ESE	ESE	SE	SE	WNW	NW	NW	NW	NNW	E	NE
19 ..	SE	SE	SE	SE	E	ENE	NW	NW	NW	NNW	NNW	N	NNE
20 ..	N	E	E	E	E	ENE	ENE	NW	NW	NNW	NNW	NNE	NNE
21 ..	NE	E	E	E	E	ENE	ENE	NW	NNW	NNW	NNW	NNE	NNE
22 ..	E	E	E	SE	ESE	ESE	NW	NW	NW	NNW	NNW	NNE	N
23 ..	N	ESE	ESE	E	ESE	ESE	W	W	WNW	WNW	NW	ENE	NNE
24 ..	ESE	NE	ENE	ENE	ENE	E	E	WNW	WNW	NNW	N	ESE	NE
25 ..	ESE	E	E	E	ENE	ESE	W	WNW	WNW	WNW	NNE	ESE	E
26 ..	ESE	ENE	ENE	E	ESE	ESE	ESE	W	WNW	WNW	NNW	NE	E
27 ..	NE	ENE	ENE	E	ESE	ESE	ESE	W	WNW	NW	NNE	ENE	NE
28 ..	ENE	ENE	ENE	E	ESE	SE	SE	WNW	WNW	WNW	NNW	NE	ENE
29 ..	NE	ENE	NE	ENE	ENE	ENE	WNW	WNW	WNW	NW	N	NNE	NNE
30 ..	NNE	ESE	ENE	E	E	ENE	ENE	WNW	NW	NW	NNW	NNE	NE
Mean direction.	NE	E	E	E	E	E	NE	WNW	NW	NW	NNW	NNE	NE

December.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean direction.
1 ..	NNE	NE	E	ENE	ENE	ENE	ENE	WNW	NW	NNW	NNW	NNE	NNE
2 ..	NNE	E	E	E	E	ESE	ESE	WNW	NW	NNW	NNE	NE	NE
3 ..	NE	ESE	E	E	ENE	N	NW	W	WNW	WNW	NW	NE	NNE
4 ..	ESE	E	E	ESE	SE	SE	S	W	WNW	WNW	NNW	NNE	ESE
5 ..	ENE	ENE	NE	E	SE	ESE	WSW	WNW	WNW	WNW	NNW	ENE	ENE
6 ..	ENE	ENE	ENE	E	E	ESE	SSW	WNW	NW	NW	N	N	NE
7 ..	NNE	ENE	ENE	E	ESE	SE	SE	WNW	NW	NNW	NNE	NNE	NE
8 ..	NNE	ESE	ESE	ESE	E	E	E	E	NNW	NNW	N	NNE	ENE
9 ..	ENE	ENE	E	ENE	E	E	E	WNW	NNW	NNW	NNE	NNE	NE
10 ..	E	ENE	ENE	ENE	ENE	ENE	ENE	NW	NNW	NNW	N	N	NE
11 ..	ESE	E	ESE	E	E	ENE	ENE	NW	NW	NNW	N	NNE	NE
12 ..	ENE	ESE	ESE	E	E	ENE	ENE	NW	NNW	NNW	NNW	NNE	NE
13 ..	NNE	ENE	E	E	E	ESE	ESE	WNW	WNW	WNW	NNW	N	ENE
14 ..	N	N	ENE	ENE	ESE	E	E	NW	NNW	NNW	NNW	N	N
15 ..	N	ESE	ESE	ESE	ESE	ESE	E	NW	NNW	N	N	ENE	NE
16 ..	N	ENE	ENE	NNE	ENE	ESE	ESE	W	NW	NNW	NNE	NE	NNE
17 ..	NNE	E	ENE	ENE	E	E	E	WNW	WNW	NNW	N	ENE	NE
18 ..	ENE	ENE	ENE	ENE	ENE	ENE	ENE	NW	NW	NNW	NNW	NNE	NE
19 ..	E	ESE	E	ENE	E	E	ESE	W	WNW	WNW	NNW	NE	ENE
20 ..	E	ESE	E	E	E	E	NW	NW	NW	NW	NNW	NNE	NNE
21 ..	NNE	NE	NNE	NNE	ENE	ENE	NW	NW	NNW	NNW	NNW	NW	N
22 ..	NNE	NNE	NNE	NNE	NE	NNW	NW	NW	NNW	NNW	NNW	N	NNW
23 ..	N	NNE	NNE	NNE	ENE	NNW	NW	NW	NNW	NNW	N	NE	N
24 ..	E	NE	NE	NE	NE	NNW	NNW	NNW	NNW	N	N	N	N
25 ..	N	N	NE	NE	ENE	ENE	NW	NW	NNW	NNW	N	NNE	N
26 ..	NE	NE	NE	ENE	E	NNE	NW	NW	NW	NNW	NNW	NNE	N
27 ..	NNE	ENE	ENE	E	ESE	ESE	ESE	WNW	WNW	NW	N	N	ENE
28 ..	NNE	ENE	ENE	ENE	E	ESE	W	WNW	WNW	NW	N	N	NE
29 ..	NE	NE	ESE	E	ENE	ENE	NW	NW	NW	NNW	NNW	NNE	N
30 ..	ESE	ESE	N	NNE	NNE	NNW	NW	NW	NNW	NNW	NNW	N	N
31 ..	NE	NNE	NNE	NNE	NNE	NNW	NNW	NNW	NNW	NNW	NNW	N	N
Mean direction.	NE	ENE	ENE	ENE	E	ENE	NNW	NW	NW	NNW	N	NNE	NNE

The daily means are derived from 24 hourly values.
The direction at any hour represents the prevailing direction between that hour and the succeeding hour.

Bi-hourly values of air temperature, 1921 (in degrees Fahrenheit).

January.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
	°	°	°	°	°	°	°	°	°	°	°	°	°	H. M.	°	H. M.	°
1	71·1	70·4	68·8	68·3	68·8	73·3	78·4	80·5	79·5	76·7	75·3	73·0	73.6	14 1	80·5	7 6	66·9
2	70·0	68·8	67·5	66·8	68·9	73·8	78·6	80·4	79·6	76·6	74·9	72·3	73.2	13 21	80·5	5 21	65·6
3	72·8	70·9	69·2	69·4	70·1	75·1	82·5	82·4	80·8	75·8	76·2	75·1	75.1	12 41	84·9	4 21	68·5
4	73·4	72·1	71·1	70·1	71·2	75·9	83·0	87·0	82·8	78·9	77·4	75·7	76.4	12 31	89·7	5 56	69·9
5	73·7	72·3	71·4	71·4	72·6	77·8	85·5	85·6	82·3	78·4	77·0	74·6	76.8	12 41	88·2	3 16	70·2
6	74·3	72·9	71·0	71·6	71·6	76·7	83·7	82·8	81·8	78·0	76·4	75·0	76.3	12 46	86·2	3 56	70·8
7	71·8	72·4	70·4	69·1	72·0	76·1	80·8	81·5	80·5	77·6	76·1	74·1	75.2	13 6	82·1	5 26	69·0
8	72·0	71·0	70·6	69·3	70·6	75·1	79·0	80·1	79·3	76·4	75·3	72·8	74.2	13 41	80·4	6 31	68·3
9	71·6	70·3	69·9	68·7	70·5	75·6	80·1	81·1	80·5	76·9	76·3	74·5	74.8	14 41	81·3	6 41	68·3
10	72·9	72·0	70·0	69·1	70·9	75·4	81·4	83·1	82·6	77·8	75·6	73·9	75.3	14 16	83·2	3 36	68·7
11	72·2	72·1	69·5	68·1	70·8	74·9	78·7	82·3	81·5	77·1	74·9	73·2	74.8	14 56	83·1	6 2	68·1
12	73·4	73·1	71·4	69·0	70·9	75·3	78·9	80·1	79·1	76·4	75·2	72·4	74.5	13 31	80·9	7 1	67·4
13	71·0	69·8	72·2	70·3	69·6	76·0	79·1	78·3	77·5	75·5	75·0	72·6	74.1	11 56	79·2	2 21	69·1
14	70·8	70·6	70·1	70·1	70·7	75·2	77·2	79·0	77·9	75·6	74·8	73·4	73·8	13 56	79·2	7 6	69·1
15	72·3	71·6	70·5	69·4	71·2	77·4	80·4	81·2	78·9	77·1	76·2	76·0	75·4	12 31	81·4	5 56	69·0
16	75·1	75·8	75·3	74·4	75·0	78·5	81·8	81·1	80·2	78·4	77·2	75·7	77·4	12 0	81·8	6 56	74·3
17	75·2	74·9	73·9	73·4	74·0	80·3	79·4	79·8	79·2	76·3	76·0	75·7	76·4	10 10	80·9	7 31	72·0
18	75·2	75·5	74·9	73·7	74·2	77·5	79·9	79·6	77·9	76·7	76·1	75·3	76·3	10 36	80·4	5 36	73·0
19	74·4	73·4	72·7	71·4	72·3	76·4	80·6	78·9	77·6	75·4	74·2	72·8	75·0	11 41	80·7	5 31	70·9
20	73·1	72·4	71·6	72·1	72·8	76·3	79·3	79·7	77·9	74·4	73·4	72·9	74·6	12 41	79·9	4 31	71·4
21	72·6	72·3	71·9	69·2	69·3	74·0	75·4	75·6	73·9	71·0	69·9	67·4	71·6	13 21	76·1	22 54	64·6
22	65·4	64·3	62·6	63·2	63·5	69·6	75·1	76·6	75·6	72·4	71·9	69·9	69·1	13 54	76·8	7 11	61·3
23	66·6	66·1	66·2	64·1	65·8	71·2	76·1	76·8	76·5	73·4	72·2	70·1	70·4	12 46	76·9	6 41	62·5
24	68·5	66·4	64·6	64·6	67·4	74·5	80·5	79·6	77·8	74·3	73·0	71·0	72·0	13 1	84·5	6 21	54·0
25	69·7	69·8	70·8	70·6	71·3	76·4	83·8	88·3	80·1	74·7	73·3	72·9	75·1	14 16	88·8	23 56	69·3
26	71·5	71·4	69·8	69·4	70·4	75·4	80·9	82·4	81·7	76·0	73·7	71·8	74·5	12 56	83·7	1 6	68·4
27	70·6	70·3	70·1	69·5	71·0	75·5	79·4	82·1	82·4	76·5	73·6	71·4	74·4	15 16	82·7	6 56	69·0
28	70·0	69·4	70·0	68·4	69·6	74·1	79·1	78·8	79·4	76·4	74·3	72·9	73·5	14 36	80·9	7 16	67·3
29	70·6	70·4	68·5	68·1	69·6	76·7	77·6	78·8	78·0	74·9	74·1	72·5	73·3	13 41	79·0	6 41	67·2
30	70·6	69·4	68·4	67·3	68·9	74·3	77·7	79·5	79·9	76·3	75·3	73·4	73·6	14 51	79·9	6 31	66·8
31	71·2	71·2	70·9	69·6	70·2	75·5	79·0	80·3	79·1	76·0	74·7	72·8	74·2	15 6	80·4	6 46	68·1
Mean	71·7	71·1	70·2	69·3	70·5	75·5	79·8	80·8	79·4	76·1	74·8	73·1	74·4	..	..	..	..

February.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
	°	°	°	°	°	°	°	°	°	°	°	°	°	H. M.	°	H. M.	°
1	70·6	69·5	69·4	67·5	69·1	75·0	79·0	80·5	79·4	76·1	75·1	74·2	73·9	14 21	81·0	7 11	67·1
2	71·6	72·1	70·5	69·1	70·8	76·8	79·9	79·5	78·0	75·5	73·9	72·5	74·1	12 46	82·2	6 36	68·4
3	70·0	70·3	69·7	71·1	70·6	73·6	76·5	77·5	76·4	72·9	71·5	71·8	72·7	13 1	78·1	3 11	68·9
4	70·4	69·7	69·4	68·6	69·1	72·7	76·6	77·4	75·2	72·1	70·7	70·2	71·8	13 46	78·3	6 31	67·8
5	69·5	67·3	67·0	66·2	68·1	71·8	75·1	76·6	74·8	71·2	69·6	69·4	70·4	13 36	76·7	6 26	66·1
6	67·1	65·6	66·0	65·1	66·6	71·0	74·0	75·8	75·3	72·1	70·9	70·1	70·1	14 21	76·3	2 41	65·0
7	69·8	68·1	67·6	67·4	68·0	72·5	74·9	76·1	76·4	73·0	71·3	69·5	71·3	13 46	76·5	7 6	66·1
8	69·8	70·3	68·4	67·7	68·8	73·1	75·7	77·6	78·1	75·3	73·8	73·2	72·6	15 56	78·1	5 36	67·1
9	71·0	69·2	68·8	67·1	68·9	74·7	77·9	77·9	77·0	74·2	73·1	72·3	72·6	12 21	70·3	6 41	65·4
10	71·0	70·3	69·0	68·8	70·2	75·5	81·9	82·2	79·3	75·7	74·8	73·3	74·2	12 21	82·6	5 26	67·9
11	71·7	71·5	72·1	71·3	72·6	78·1	80·4	81·4	80·7	77·9	75·3	75·5	75·8	14 46	82·0	6 41	70·0
12	74·9	74·6	74·2	73·1	74·5	77·2	79·7	80·0	80·4	78·1	76·4	74·9	76·5	15 46	80·6	6 26	72·6
13	74·5	74·0	74·0	73·3	75·1	77·5	79·3	79·4	78·6	75·3	74·1	71·5	75·5	14 41	79·8	23 50	70·5
14	70·8	71·0	69·1	69·5	70·0	74·5	77·3	78·9	78·9	76·4	75·3	73·8	73·7	14 51	79·1	6 46	67·8
15	72·2	70·5	71·2	70·9	72·7	79·3	89·5	88·0	82·6	78·7	77·6	76·6	77·6	13 26	91·7	3 21	69·9
16	74·0	75·2	74·8	74·7	76·1	81·7	88·3	92·8	87·4	81·3	79·9	77·8	80·4	14 56	94·3	1 21	73·9
17	75·3	74·7	74·9	73·5	75·7	81·4	83·0	84·1	83·2	80·2	78·2	76·4	78·4	12 56	85·3	6 41	73·1
18	74·4	72·7	73·0	71·9	74·2	79·1	82·5	82·8	81·3	77·7	76·6	74·5	76·7	10 56	83·4	6 11	71·4
19	74·9	72·4	71·7	69·8	72·3	77·1	79·3	80·9	79·2	77·3	75·9	73·5	75·3	14 16	81·0	4 16	69·0
20	72·9	71·5	72·1	70·4	70·4	76·1	81·3	81·6	81·1	76·8	75·3	74·4	75·3	14 16	82·4	6 36	65·9
21	72·6	71·3	69·2	68·8	69·4	75·6	78·3	80·8	78·9	75·9	74·1	73·4	74·0	14 16	80·9	6 51	67·3
22	71·2	71·0	70·2	67·4	70·4	75·6	79·0	81·0	80·2	76·7	74·4	72·8	74·2	13 31	81·1	6 1	67·2
23	71·8	72·4	69·5	67·3	70·8	76·1	80·1	81·6	79·3	76·5	75·8	73·8	74·5	13 41	82·1	6 16	66·5
24	72·6	71·9	71·5	69·6	72·5	78·1	81·5	83·4	82·8	79·2	76·7	76·2	76·3	14 16	84·0	6 16	69·0
25	74·9	74·9	71·4	72·0	72·1	77·4	81·7	83·0	83·0	79·9	77·1	76·3	77·0	14 51	84·6	4 0	71·4
26	75·7	74·8	74·3	73·3	74·2	76·0	80·5	82·0	83·1	79·7	77·5	76·7	77·2	15 26	83·4	7 6	72·3
27	75·6	75·0	73·1	72·8	74·6	78·2	82·2	84·3	83·2	81·0	78·2	76·9	77·9	14 1	84·3	6 41	71·9
28	74·7	73·2	73·5	73·2	74·8	79·1	80·5	81·5	80·1	77·5	76·5	75·3	76·6	13 1	81·9	1 46	72·6
Mean	72·3	71·6	70·9	70·0	71·5	76·2	79·9	81·0	79·8	76·6	75·0	73·8	74·9	..	..	..	..

The daily means are derived from 24 hourly values.

Bi-hourly values of air temperature, 1921 (in degrees Fahrenheit).

March.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.	Maximum. Time.	Mag.	Minimum. Time.	Mag.
	°	°	°	°	°	°	°	°	°	°	°	°	°	H. M.	°	H. M.	°
1	74·8	73·2	72·9	72·9	73·4	77·0	80·1	81·4	81·1	78·7	78·3	77·5	76·8	13 41	81·6	5 16	72·1
2	75·2	73·8	73·0	72·0	75·1	81·3	84·8	84·5	82·8	81·0	79·4	77·3	78·4	11 41	84·9	6 26	71·3
3	75·2	74·6	72·6	71·1	76·7	84·2	86·1	86·5	86·1	82·1	81·0	78·8	79·5	13 51	87·3	6 1	71·0
4	77·8	76·4	74·0	72·3	76·8	81·4	87·8	87·3	86·2	82·2	79·5	78·4	79·9	12 6	88·4	5 6	71·5
5	77·5	76·2	75·0	76·4	76·9	81·3	83·7	84·2	84·1	80·7	79·0	78·4	79·4	13 51	84·4	4 26	74·4
6	77·5	76·5	74·7	74·1	75·4	80·8	83·6	84·3	83·4	81·0	78·7	77·3	78·9	13 51	84·7	5 26	73·0
7	76·3	76·4	75·8	75·1	76·5	80·3	83·1	83·5	83·5	80·5	78·6	77·0	78·8	14 26	83·9	5 36	74·3
8	76·9	75·2	75·5	74·5	75·2	80·3	84·0	85·1	84·9	81·0	78·2	76·1	78·9	14 36	85·6	7 31	73·8
9	75·2	75·2	75·2	73·9	75·5	79·1	83·6	84·6	83·9	81·1	79·7	79·2	79·0	12 51	84·9	5 36	73·2
10	79·1	78·5	78·1	76·8	79·1	82·3	84·3	84·6	84·2	81·5	79·0	76·9	80·3	14 21	85·2	23 10	75·6
11	76·3	75·9	75·1	74·7	76·9	80·4	82·6	84·2	83·1	79·9	78·3	78·1	78·8	14 26	84·4	5 11	73·7
12	77·7	77·3	75·9	75·1	77·8	81·2	83·4	85·3	85·4	82·1	80·1	79·7	80·1	15 11	86·0	6 36	74·4
13	78·0	75·6	75·6	74·7	78·2	82·5	84·7	85·2	85·4	82·7	81·1	79·1	80·2	14 31	85·6	5 36	74·4
14	78·7	77·4	76·0	74·6	78·2	81·7	84·0	83·7	83·7	81·4	80·7	79·0	80·0	12 46	84·6	6 36	74·2
15	78·9	79·0	78·4	76·0	79·3	83·2	86·8	86·2	85·1	82·2	80·5	78·6	81·2	12 16	87·2	6 41	74·9
16	78·7	78·2	77·6	76·7	78·5	82·2	86·8	87·0	85·4	81·8	79·9	78·4	80·8	12 46	87·5	6 26	75·6
17	77·4	77·2	77·0	76·4	79·8	82·5	85·1	85·4	84·3	81·4	80·4	78·4	80·4	13 21	85·8	5 41	75·9
18	77·1	77·2	75·5	75·6	78·3	82·3	85·5	85·9	84·9	81·0	79·7	77·9	80·1	13 21	85·9	5 6	74·6
19	77·5	76·8	76·1	75·5	77·5	80·1	84·5	86·6	85·6	81·9	80·1	79·2	80·2	14 2	86·6	6 1	75·4
20	78·2	78·0	77·5	77·2	78·2	81·8	84·5	85·5	85·0	81·6	79·8	79·3	80·6	13 21	85·5	6 26	76·4
21	78·2	78·0	77·5	76·7	78·8	81·1	83·7	84·0	82·9	80·7	80·1	79·4	80·1	13 2	84·1	6 26	75·8
22	79·3	77·5	76·2	74·4	78·0	82·4	85·3	86·0	86·2	82·4	80·6	79·8	80·7	14 46	86·7	7 26	74·3
23	78·5	77·2	77·2	75·0	77·6	82·1	82·3	82·6	81·4	78·7	77·5	77·4	78·9	14 31	82·7	6 26	74·6
24	77·5	76·7	76·0	75·3	77·2	81·4	83·7	83·1	82·3	80·7	80·4	78·2	79·5	11 26	83·7	6 26	74·2
25	77·9	76·8	74·7	73·5	75·6	82·0	83·0	83·8	84·3	82·5	81·0	80·5	79·7	13 6	84·3	6 26	73·2
26	79·7	78·1	75·0	76·1	80·4	86·6	87·4	86·3	83·3	82·0	81·3	80·8	81·3	10 21	87·4	3 56	74·3
27	79·3	79·0	77·5	76·7	80·2	83·6	85·8	85·4	85·2	82·0	80·2	79·5	81·1	12 2	85·8	4 41	75·9
28	78·6	77·3	77·9	77·3	79·2	82·4	84·8	86·2	85·2	83·5	82·1	80·1	81·4	14 26	86·7	2 1	76·4
29	79·7	77·2	76·5	76·5	80·4	84·0	85·6	86·2	85·2	81·2	79·6	79·6	80·9	13 36	87·0	5 1	76·2
30	79·0	76·9	77·4	75·7	79·0	82·4	84·6	84·4	83·3	79·9	78·5	77·7	79·8	12 41	85·2	3 11	75·2
31	76·9	76·4	75·8	75·6	77·2	81·2	83·1	84·0	83·3	80·6	79·7	79·4	79·5	13 16	84·3	5 46	74·9
Mean	77·7	76·8	75·9	75·1	77·6	81·8	84·5	84·9	84·2	81·3	79·8	78·6	79·9	..	..	..	..

April.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.	Maximum. Time.	Mag.	Minimum. Time.	Mag.
	°	°	°	°	°	°	°	°	°	°	°	°	°	H. M.	°	H. M.	°
1	78·6	78·0	77·0	75·1	79·0	82·2	86·8	86·1	85·0	82·1	80·8	80·2	80·9	11 41	86·9	6 26	74·6
2	79·9	79·3	79·2	78·4	81·2	83·0	88·1	87·7	85·0	82·2	81·3	80·9	82·2	11 56	88·1	6 1	78·4
3	80·4	80·1	79·8	79·4	81·1	83·4	86·7	87·3	86·3	83·1	82·3	81·4	82·6	12 26	87·3	6 16	78·9
4	81·1	80·3	80·1	79·9	82·4	85·5	88·2	87·3	86·6	83·7	81·9	80·8	83·2	12 21	88·3	5 56	79·7
5	80·6	80·4	79·7	78·8	81·1	84·0	86·4	86·2	85·8	83·0	81·2	79·7	82·3	12 51	86·5	6 11	78·6
6	78·1	76·8	76·9	75·3	76·4	82·5	86·5	86·5	85·1	82·6	80·9	79·8	80·9	12 26	87·5	6 11	74·8
7	79·7	79·9	79·7	78·2	81·0	83·6	86·5	87·0	85·8	83·2	81·7	81·5	82·4	14 6	87·1	6 11	77·9
8	81·0	80·3	79·4	78·9	81·0	84·0	87·7	87·5	85·9	82·7	81·4	80·1	82·6	12 26	88·2	4 16	78·8
9	80·0	79·6	78·2	76·9	80·2	83·4	87·2	87·6	86·8	84·0	82·0	80·7	82·4	14 11	88·1	5 26	76·6
10	80·8	79·9	78·8	78·3	80·7	83·9	86·8	87·8	86·5	83·3	82·2	81·5	82·7	13 51	88·0	5 11	77·5
11	81·1	80·2	78·8	77·8	80·8	84·0	87·4	86·9	86·5	83·9	82·6	81·5	82·8	13 56	87·7	4 46	77·5
12	81·7	81·7	80·8	80·2	82·7	85·2	88·4	88·3	86·8	84·5	83·1	82·7	84·0	14 21	88·6	4 11	79·9
13	82·7	81·5	80·1	80·9	83·0	85·9	88·6	88·8	87·8	84·4	82·6	80·0	83·9	13 26	89·2	4 11	79·8
14	79·7	79·7	80·2	80·5	82·7	86·0	88·4	88·0	86·7	83·5	82·0	81·1	83·3	12 56	88·6	2 11	79·1
15	81·0	81·6	81·2	80·9	82·5	86·5	88·9	89·0	87·7	84·5	82·5	81·6	84·0	12 46	89·1	4 26	80·4
16	80·2	80·2	80·4	79·9	83·0	85·2	86·8	87·6	86·8	83·3	81·9	80·6	83·1	13 21	88·5	5 41	79·4
17	80·5	80·2	80·5	80·2	82·3	85·3	87·2	87·8	86·1	83·0	81·6	80·9	83·1	13 21	88·0	2 26	79·8
18	81·1	80·0	79·2	80·0	83·0	85·3	87·8	88·2	87·5	84·0	83·0	82·0	83·5	13 24	88·3	5 41	79·1
19	81·9	81·1	79·7	78·0	80·6	83·6	88·7	88·7	87·3	84·4	83·2	82·9	83·6	12 31	89·3	5 56	77·6
20	82·9	81·4	79·9	78·8	82·8	85·8	88·1	87·2	85·5	82·8	81·5	81·2	83·3	12 11	88·7	5 57	78·8
21	81·4	80·5	79·9	78·0	81·2	85·8	88·9	88·8	87·8	84·6	83·5	83·3	83·9	13 41	89·5	5 47	78·0
22	82·6	81·6	79·9	78·9	82·6	86·1	87·8	88·6	87·8	84·6	82·6	81·7	83·9	13 26	88·8	5 46	78·7
23	82·5	81·2	80·5	79·2	82·2	86·0	88·5	88·9	87·6	84·0	82·7	81·8	83·8	14 6	89·2	5 21	79·2
24	81·8	81·0	81·5	80·7	83·6	86·0	88·4	88·6	86·9	84·0	83·2	82·3	84·1	13 26	89·4	2 41	80·2
25	82·3	81·1	81·9	80·8	82·9	85·7	87·8	88·4	86·6	84·7	82·9	81·8	84·1	13 11	88·9	2 6	80·3
26	82·6	82·5	81·4	80·8	83·5	86·7	89·2	89·5	88·5	84·8	83·2	82·1	84·5	14 1	89·5	5 41	80·6
27	81·6	81·5	80·8	80·7	83·2	86·5	89·1	89·4	88·3	*	*	82·3	..	12 51	90·1	5 46	80·4
28	*	*	*	81·4	84·0	88·1	90·3	91·7	91·0	88·7	85·3	84·9	..	14 26	92·3	..	..
29	84·4	83·8	82·5	81·7	85·2	90·2	92·1	92·4	90·8	86·6	86·3	84·9	86·8	12 41	92·4	5 56	81·3
30	83·9	83·3	82·1	81·5	85·0	87·8	89·4	88·7	88·1	86·1	84·8	84·3	85·5	12 46	90·3	5 46	80·9
Mean	81·2	80·6	80·0	79·2	81·9	85·1	88·0	88·0	86·8	83·8	82·5	81·5	83·3	..	..	..	..

* Curve lost.

The daily means are derived from 24 hourly values

Bi-hourly values of air temperature, 1921 (in degrees Fahrenheit).

May.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
	°	°	°	°	°	°	°	°	°	°	°	°	°	H. M.	°	H. M.	°
1 ..	83·3	82·7	82·1	81·3	84·5	87·8	90·0	90·4	89·3	86·4	85·1	84·2	85·7	13 21	90·9	5 56	80·4
2 ..	83·7	83·3	82·9	82·9	85·1	88·4	90·5	90·5	90·1	86·0	84·1	83·2	85·8	12 26	90·7	4 11	82·5
3 ..	82·7	82·6	82·3	82·3	84·5	87·7	89·5	89·5	89·1	85·7	84·4	83·6	85·3	12 11	89·6	3 26	81·5
4 ..	82·9	82·3	81·7	81·4	84·6	87·3	88·7	89·3	88·1	86·2	84·6	83·8	85·1	13 46	89·4	4 26	80·9
5 ..	83·2	82·6	81·8	81·0	85·1	87·4	89·6	89·5	88·9	85·8	84·0	83·7	85·3	13 16	90·4	5 46	80·5
6 ..	83·2	82·9	82·8	81·9	84·4	87·2	90·0	89·8	89·2	85·9	84·0	83·4	85·4	13 16	90·6	5 36	81·4
7 ..	82·8	82·0	81·1	80·9	84·4	87·0	88·8	89·9	88·5	85·8	84·6	83·6	85·0	14 6	90·1	5 26	80·3
8 ..	83·0	82·2	82·1	81·3	83·9	86·5	88·7	89·3	88·5	84·7	83·0	82·4	84·6	14 11	89·7	5 36	80·5
9 ..	81·9	81·3	80·3	79·8	82·9	85·6	88·8	89·3	87·8	84·5	82·8	82·3	84·0	13 16	89·7	5 46	**79·0**
10 ..	82·3	81·6	81·2	80·3	82·9	86·5	89·1	89·7	88·4	85·0	83·1	82·4	84·4	13 36	90·2	5 36	79·6
11 ..	81·9	81·3	80·3	80·2	83·3	86·5	89·5	89·1	88·8	86·3	83·7	82·3	84·5	12 6	90·2	4 41	79·7
12 ..	83·1	81·9	81·3	81·1	84·5	88·5	90·6	91·1	89·6	86·6	84·8	83·8	85·6	13 21	91·2	4 11	80·3
13 ..	82·5	82·6	82·1	81·8	84·3	87·5	90·3	90·9	89·3	86·6	84·3	83·4	85·5	14 1	90·9	5 41	81·4
14 ..	82·2	82·3	82·2	82·3	84·7	88·5	90·2	90·1	88·9	85·5	84·0	83·2	85·4	13 56	90·7	1 26	81·4
15 ..	82·0	81·0	81·0	81·7	85·1	87·8	90·1	89·9	88·6	85·7	84·4	83·3	85·1	12 51	90·3	2 41	80·5
16 ..	82·5	82·2	81·9	81·2	84·0	87·1	88·3	89·1	88·7	85·0	83·6	83·0	84·7	12 51	89·5	4 51	80·3
17 ..	82·5	82·3	81·5	81·5	84·2	87·2	89·7	90·1	89·0	86·7	84·7	83·8	85·2	14 56	90·2	3 26	80·9
18 ..	82·5	82·1	81·7	81·7	84·9	87·4	89·6	90·4	89·9	87·3	86·0	84·7	85·7	13 56	90·6	5 16	81·0
19 ..	83·7	82·5	81·7	81·8	84·3	87·7	89·7	90·4	89·9	86·6	85·0	84·4	85·7	14 56	90·5	4 1	81·7
20 ..	83·8	83·0	82·7	82·7	85·4	88·3	89·7	90·3	89·7	87·1	85·5	84·7	86·1	14 46	90·4	4 26	81·9
21 ..	84·0	83·6	83·4	83·3	85·2	88·2	90·3	91·1	90·2	86·5	85·2	84·4	86·3	13 6	91·3	4 41	82·3
22 ..	83·9	83·4	83·0	82·8	85·2	88·4	90·8	91·0	90·1	86·8	85·0	84·6	86·3	13 26	91·1	5 11	82·7
23 ..	84·1	83·6	83·2	82·9	85·5	89·0	91·0	91·0	90·2	87·2	84·9	84·0	86·5	13 6	91·8	4 26	82·4
24 ..	83·6	83·5	83·2	82·5	85·2	88·3	90·7	91·3	89·9	86·7	84·9	84·4	86·1	13 51	91·3	4 56	82·1
25 ..	84·1	83·4	83·1	83·0	86·2	88·9	90·9	91·2	90·4	87·0	84·8	84·2	86·4	14 26	91·5	4 26	82·3
26 ..	83·4	83·3	83·0	82·5	85·8	87·3	89·6	90·1	89·3	85·9	84·3	83·7	85·6	13 6	90·8	5 16	82·2
27 ..	83·3	82·8	82·4	82·1	85·4	88·5	89·8	91·2	89·6	86·3	84·7	83·7	85·8	14 16	91·3	4 46	81·2
28 ..	83·1	82·8	82·5	82·3	85·4	88·3	90·0	90·4	90·3	87·4	85·4	84·4	86·0	14 26	90·8	4 41	81·6
29 ..	84·1	83·8	82·9	83·2	85·9	89·3	90·9	91·3	90·4	87·2	85·6	84·9	86·6	14 21	91·4	4 26	82·3
30 ..	84·3	83·7	83·5	83·7	86·2	88·8	90·8	91·3	91·1	87·7	86·2	85·3	86·9	14 26	**92·1**	4 31	83·0
31 ..	84·5	84·3	84·1	84·3	85·8	89·4	90·5	91·8	91·0	87·9	86·5	85·5	87·2	14 6	91·9	4 26	83·5
Mean ..	83·2	82·7	82·2	82·0	84·8	87·8	89·9	90·3	89·4	86·3	84·6	83·8	85·6	..	..	..	..

June.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
	°	°	°	°	°	°	°	°	°	°	°	°	°	H. M.	°	H. M.	°
1 ..	84·9	84·5	84·3	84·2	86·8	88·7	91·1	91·8	90·9	88·5	86·9	86·2	87·5	14 36	91·9	4 26	83·6
2 ..	85·5	84·9	85·0	85·2	86·7	89·9	92·4	91·7	90·9	88·7	87·1	86·3	87·8	13 31	**92·5**	4 16	84·2
3 ..	86·0	85·4	84·9	85·1	86·7	89·4	87·2	89·5	88·5	87·3	86·2	85·5	86·9	14 0	89·5	4 41	84·1
4 ..	84·6	84·1	84·1	83·2	86·1	88·9	89·2	89·5	89·4	86·9	85·6	85·2	86·5	13 21	89·8	6 6	82·4
5 ..	84·8	83·3	83·7	84·0	86·4	86·3	90·5	91·1	88·4	86·4	85·7	85·1	86·4	15 1	91·3	1 6	82·2
6 ..	84·8	83·7	83·8	83·7	86·3	89·2	91·0	91·2	90·8	87·8	86·2	85·5	87·0	15 36	91·3	1 1	82·7
7 ..	85·2	84·7	84·3	84·3	86·5	90·2	91·8	92·3	88·7	88·1	86·7	86·1	87·4	13 56	92·4	6 21	83·4
8 ..	85·6	84·9	84·6	85·1	86·5	89·6	91·8	91·9	91·1	88·7	86·9	86·1	87·7	12 16	92·0	4 31	83·9
9 ..	85·6	85·1	84·5	83·4	86·1	89·2	90·9	90·4	87·8	86·4	85·6	85·4	86·7	12 41	91·0	5 36	82·8
10 ..	83·4	83·3	83·0	82·6	84·0	86·4	88·4	87·7	84·3	84·2	82·4	83·0	84·3	11 36	88·4	4 56	81·2
11 ..	82·0	81·7	81·7	80·2	80·0	82·0	80·2	81·7	82·6	80·8	79·6	76·7	80·7	16 21	82·7	20 56	75·1
12 ..	76·8	76·4	77·2	77·3	78·7	78·5	79·5	82·0	82·3	81·9	81·4	78·1	79·4	15 21	82·4	1 41	75·6
13 ..	79·7	79·7	77·5	77·0	76·7	79·0	82·2	81·8	81·7	82·0	81·7	81·2	80·1	12 51	82·5	7 6	75·9
14 ..	80·9	80·1	78·4	79·5	81·2	82·0	84·4	83·5	84·1	81·4	81·5	82·1	81·5	16 1	84·7	3 16	76·9
15 ..	80·5	80·9	81·8	80·0	81·4	83·4	84·6	83·5	82·7	80·4	78·2	80·4	81·5	13 6	85·3	19 56	78·2
16 ..	81·0	80·2	81·0	80·2	80·6	82·1	84·2	84·1	83·6	82·2	82·0	82·0	81·8	13 41	84·7	4 41	78·6
17 ..	81·6	80·5	81·1	80·5	82·1	84·2	84·3	78·9	77·8	78·5	79·0	79·2	80·6	11 1	85·3	14 16	77·3
18 ..	80·4	81·2	80·6	81·0	77·5	80·8	81·7	78·9	78·4	79·0	79·6	79·7	80·0	12 36	81·9	7 41	76·5
19 ..	80·2	79·0	79·2	78·9	79·0	77·0	81·4	81·3	81·6	81·2	77·8	80·4	79·8	13 16	81·9	10 11	75·7
20 ..	80·9	81·0	81·0	80·7	81·2	75·8	79·0	79·5	79·5	78·9	78·6	80·7	79·7	22 16	82·2	10 36	**73·8**
21 ..	80·6	80·9	81·5	81·7	82·6	84·6	85·4	86·4	85·5	84·1	83·3	83·2	83·4	13 51	86·7	0 56	80·4
22 ..	82·9	83·0	82·8	82·4	83·7	84·9	86·8	87·0	85·8	84·3	83·3	83·1	84·2	14 6	87·6	5 31	81·6
23 ..	82·6	82·5	82·2	82·0	83·0	85·6	86·8	87·2	86·4	84·8	83·2	82·8	84·1	13 46	87·3	4 56	81·6
24 ..	82·7	82·5	82·2	82·2	84·3	86·1	87·5	87·9	86·5	84·9	83·7	83·1	84·5	14 0	87·9	3 36	81·4
25 ..	82·6	82·5	82·1	82·1	83·2	85·2	87·3	88·2	85·9	84·6	83·9	83·3	84·3	14 1	88·2	4 26	81·4
26 ..	83·1	82·8	82·4	82·2	83·5	86·3	87·4	87·8	87·8	85·5	83·8	83·1	84·7	13 1	88·6	5 36	81·5
27 ..	82·9	82·8	82·5	82·2	83·9	86·0	88·0	87·8	88·4	86·3	84·3	83·6	84·7	13 41	89·1	5 36	81·6
28 ..	83·2	83·0	82·6	81·7	84·4	86·3	88·6	88·4	86·0	83·0	83·0	82·8	84·4	12 46	88·7	18 21	80·1
29 ..	82·6	82·2	82·0	81·9	82·6	84·0	85·4	86·5	85·6	84·2	83·0	82·5	83·5	14 46	87·1	3 1	81·0
30 ..	82·5	82·1	81·3	81·6	83·0	85·0	87·1	85·4	86·6	84·5	83·1	82·5	83·8	12 11	87·2	3 26	80·3
Mean ..	82·7	82·3	82·1	81·9	83·2	84·9	86·5	86·5	85·7	84·2	83·1	82·8	83·8	..	..	..	..

The daily means are derived from 24 hourly values.

Bi-hourly values of air temperature, 1921 (in degrees Fahrenheit).

July.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.	Maximum. Time.	Mag.	Minimum. Time.	Mag.
	°	°	°	°	°	°	°	°	°	°	°	°	°	H. M.	°	H. M.	°
1	80·7	79·0	79·8	80·2	81·3	84·6	87·2	86·2	85·5	83·7	83·0	83·1	82·9	14 41	87·3	1 11	78·4
2	83·2	82·8	82·5	81·5	83·0	83·2	86·8	86·8	86·7	84·6	83·3	83·3	84·0	14 36	87·1	5 26	80·0
3	83·1	82·3	82·2	81·3	83·5	85·2	87·1	86·8	86·1	85·1	83·9	83·1	84·1	12 46	87·9	5 41	80·1
4	82·7	82·5	82·0	81·3	83·7	85·6	87·6	88·0	87·7	85·9	84·5	83·7	84·5	14 6	88·1	5 6	80·3
5	83·7	83·1	82·5	81·5	83·1	85·4	87·3	86·5	87·2	85·5	84·2	84·0	84·5	12 36	87·6	5 56	81·0
6	83·6	83·0	82·7	82·4	85·1	87·1	87·6	88·2	88·1	85·5	84·5	84·3	85·1	14 26	88·7	3 46	82·0
7	84·3	83·7	83·5	83·2	84·1	86·2	81·9	90·2	76·7	77·2	77·2	77·6	80·6	8 26	84·6	15 6	76·0
8	77·7	77·8	77·3	77·4	78·1	79·3	79·5	80·0	77·2	77·5	78·2	77·6	78·1	13 51	80·4	4 41	76·8
9	78·3	78·6	78·5	78·3	80·3	80·8	83·3	85·6	84·5	83·3	82·3	81·0	81·2	14 1	85·7	5 26	77·3
10	81·0	81·3	80·7	81·0	82·2	84·2	85·9	86·2	86·0	84·2	81·2	81·4	82·9	15 1	86·8	1 26	79·8
11	80·7	80·7	80·4	78·4	81·1	81·7	83·4	84·0	83·6	83·2	81·9	79·4	81·5	14 36	84·8	5 46	77·9
12	79·4	79·3	79·4	79·1	80·5	80·1	79·5	79·2	79·2	78·4	78·1	78·7	79·1	8 1	80·5	13 6	76·9
13	76·2	77·3	78·1	78·6	80·1	80·4	80·4	83·0	83·0	82·0	81·3	81·3	80·3	14 26	83·1	0 26	75·3
14	80·0	78·5	78·7	78·5	79·0	80·6	82·3	83·8	83·9	83·3	81·9	81·0	80·9	16 6	84·0	2 56	77·4
15	80·3	78·4	78·1	78·1	79·4	81·6	80·8	79·5	79·9	80·2	79·0	78·7	79·6	10 26	82·2	6 16	76·9
16	79·3	78·8	77·3	76·4	78·6	81·3	81·6	80·8	80·5	80·5	79·7	78·8	79·3	12 2	81·6	5 11	75·0
17	76·9	77·3	77·6	77·2	78·7	80·1	81·9	83·1	82·6	77·6	76·7	75·8	78·8	14 46	83·9	0 26	75·5
18	75·7	76·9	77·3	77·2	76·8	76·8	78·3	80·2	80·1	79·7	77·7	77·9	77·9	14 1	80·3	0 26	75·0
19	77·3	77·7	77·3	76·4	75·3	77·4	79·4	80·6	79·6	77·9	78·1	76·8	77·8	14 56	81·5	7 11	74·4
20	77·5	76·9	75·8	75·5	76·1	77·2	79·8	79·5	78·7	78·7	78·7	76·8	77·6	13 56	80·1	4 26	74·2
21	76·8	77·7	77·3	79·3	80·1	78·7	79·4	80·8	80·8	81·3	80·9	81·4	79·6	15 16	81·5	0 26	75·9
22	81·0	80·8	79·7	81·0	81·4	80·8	78·8	79·1	79·7	80·5	80·6	80·9	80·4	7 56	81·7	11 6	77·3
23	81·3	79·1	80·2	80·5	78·6	79·3	79·2	78·5	80·2	80·1	78·4	78·2	79·3	0 26	81·6	8 56	75·9
24	79·2	79·7	78·4	80·1	79·1	77·7	80·0	80·2	78·0	79·0	76·6	79·8	79·2	13 16	80·5	19 56	76·5
25	80·1	80·5	80·5	80·4	79·6	82·5	83·3	81·2	82·9	81·2	81·1	81·1	81·2	12 6	83·4	6 31	77·9
26	80·8	79·9	77·9	78·1	78·7	79·3	81·9	78·6	80·3	79·4	79·8	79·9	79·4	12 21	82·0	6 46	76·3
27	80·4	80·3	78·4	78·3	79·1	80·8	80·5	80·2	79·7	78·4	77·8	79·7	79·5	11 26	81·0	3 46	77·6
28	79·1	78·8	80·3	80·1	79·9	81·2	81·0	79·5	82·0	81·2	81·0	81·0	80·5	13 26	82·2	14 36	78·2
29	80·6	80·1	79·9	80·3	80·3	80·2	81·6	82·1	81·2	81·0	80·8	80·7	80·6	14 11	82·2	7 16	78·5
30	80·4	79·8	79·6	80·5	81·3	81·0	82·2	82·9	82·3	81·5	81·5	81·1	81·2	13 1	83·6	4 6	78·7
31	80·8	80·7	79·6	80·4	80·4	81·6	83·4	83·7	82·1	81·2	81·2	80·5	81·2	14 1	83·7	3 46	78·6
Mean	80·1	79·8	79·5	79·4	80·3	81·2	82·4	82·4	82·1	81·3	80·5	80·3	80·7	..	..	..	..

August.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.	Maximum. Time.	Mag.	Minimum. Time.	Mag.
	°	°	°	°	°	°	°	°	°	°	°	°	°	H. M.	°	H. M.	°
1	79·0	79·8	77·8	79·3	80·7	82·5	83·8	82·7	81·8	81·5	81·2	81·0	80·8	12 11	83·9	4 16	76·5
2	80·8	80·3	79·9	80·2	81·0	81·6	82·3	82·3	81·4	80·5	80·4	79·2	80·5	14 21	82·8	22 56	76·3
3	78·7	79·4	79·1	78·0	80·1	81·2	81·8	81·8	81·9	81·2	80·6	80·2	80·0	12 36	82·0	5 41	76·3
4	80·0	79·8	79·4	79·8	79·7	82·4	84·5	84·8	83·8	81·8	80·5	80·2	81·3	13 56	84·9	6 16	78·3
5	80·4	80·1	79·4	78·7	79·0	81·5	83·3	82·1	82·0	79·8	80·3	79·5	80·4	11 56	83·4	4 56	76·7
6	79·3	78·5	78·2	77·4	80·2	81·2	80·5	78·3	77·6	78·5	78·1	78·0	78·8	10 26	81·3	5 51	76·4
7	78·3	77·9	78·2	79·0	79·7	80·7	79·6	80·8	80·9	80·7	77·9	79·3	79·4	10 41	81·0	13 51	76·3
8	79·0	78·6	77·6	76·8	79·3	81·1	80·4	79·9	79·3	78·7	78·9	78·2	78·9	11 21	82·2	0 56	75·7
9	77·7	78·0	77·5	78·1	76·5	76·6	76·4	77·0	78·2	78·6	78·9	78·6	77·5	20 6	79·2	15 6	75·6
10	78·6	78·0	77·4	76·5	77·2	79·0	80·2	82·0	82·2	79·7	78·6	77·0	79·2	15 1	82·6	5 31	75·7
11	79·4	79·6	79·4	79·2	80·3	80·3	80·7	82·8	81·4	80·7	80·2	80·1	80·4	14 11	82·9	4 36	78·0
12	79·3	79·4	79·8	80·1	80·4	80·0	82·6	82·5	81·0	80·8	80·6	79·7	80·6	12 46	82·7	0 36	78·0
13	79·5	79·9	79·9	79·6	80·1	80·2	81·7	80·8	79·4	79·1	78·7	79·3	79·8	12 51	82·2	19 41	77·4
14	79·9	79·0	79·4	79·5	80·3	82·2	83·3	83·1	79·3	80·1	79·3	80·1	80·5	12 16	83·5	1 31	78·2
15	80·2	80·1	79·8	79·3	79·3	79·0	80·8	82·0	82·3	79·9	79·9	79·7	80·0	11 56	82·8	9 16	77·3
16	77·6	78·0	79·4	79·4	78·9	80·3	81·7	83·1	82·5	80·1	80·1	80·2	80·0	14 2	83·1	7 16	76·8
17	79·6	79·2	77·8	78·5	79·5	81·3	81·5	81·4	80·3	79·3	79·9	79·3	79·8	12 31	81·6	4 6	77·4
18	78·7	78·3	79·0	78·6	79·3	79·8	78·4	78·8	80·4	79·0	78·3	79·0	79·0	11 26	81·6	6 51	76·8
19	78·3	77·7	77·9	78·5	79·8	79·0	80·4	81·8	81·1	80·3	78·6	79·1	79·2	13 6	82·1	3 11	76·1
20	79·0	79·0	78·4	78·2	79·7	81·6	83·4	83·7	82·9	81·0	79·7	79·4	80·5	13 41	83·8	3 36	77·3
21	79·0	78·4	77·7	78·1	79·0	81·8	82·5	82·8	82·4	80·4	79·2	78·4	80·1	11 31	82·9	3 56	76·9
22	78·0	77·6	76·2	76·7	77·5	80·6	82·2	81·4	83·3	81·0	80·1	77·5	79·3	15 36	83·4	4 21	75·8
23	78·6	79·0	79·0	78·5	79·4	81·9	83·2	83·2	82·4	81·0	80·1	80·2	80·6	12 36	83·3	7 16	77·4
24	77·4	78·3	77·9	78·2	79·5	81·7	83·4	83·9	83·0	81·0	80·0	79·5	80·3	13 51	84·0	0 31	77·3
25	78·8	78·8	78·8	78·6	79·0	81·3	81·0	83·3	83·4	81·0	80·1	80·3	80·4	11 6	83·7	6	77·5
26	79·4	79·2	79·0	78·8	77·5	80·2	83·0	83·3	80·7	80·7	80·2	78·9	80·1	14 26	84·0	7 46	77·4
27	79·1	79·0	79·1	79·3	80·4	82·4	84·3	84·4	84·1	81·5	80·7	80·2	81·2	14 1	84·3	7 26	78·6
28	79·5	79·3	79·1	78·1	79·8	78·7	82·8	84·1	84·4	81·5	80·7	79·9	80·6	13 41	84·4	5 56	77·8
29	78·2	79·2	79·4	79·3	80·4	82·3	83·3	83·3	83·5	81·6	80·8	80·3	81·1	13 16	84·3	0 11	78·1
30	79·9	79·4	79·3	79·0	80·3	79·6	83·1	82·3	79·8	80·0	80·0	79·4	80·3	13 1	83·9	6 1	79·0
31	79·4	79·3	79·0	79·0	77·2	81·3	82·8	83·5	83·9	81·5	80·1	79·1	80·4	16 6	84·0	8 6	76·9
Mean	79·1	79·0	78·7	78·7	79·4	80·8	81·9	82·2	81·6	80·4	79·8	79·4	80·0	..	..	..	..

The daily means are derived from 24 hourly values.

Bi-hourly values of air temperature, 1921 (in degrees Fahrenheit).

September.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.	Maximum. Time.	Mag.	Minimum. Time.	Mag.
	°	°	°	°	°	°	°	°	°	°	°	°	°	H. M.	°	H. M.	°
1	78·4	77·8	78·7	78·8	79·5	81·7	82·8	80·3	80·7	77·3	76·7	79·3	79·3	10 41	82·9	19 16	75·9
2	78·6	77·8	78·6	79·0	79·5	80·5	79·2	78·8	80·2	80·3	80·2	80·1	79·4	10 56	81·2	6 3	76·9
3	80·0	79·8	79·8	79·6	79·4	79·3	81·3	81·8	80·9	80·5	80·2	79·7	80·1	13 11	82·4	8 56	75·9
4	79·5	79·3	78·9	78·8	80·2	78·0	80·9	82·7	81·1	80·5	80·1	80·1	80·0	14 2	82·7	9 51	77·4
5	80·4	80·1	80·1	79·4	80·3	81·0	80·4	81·8	82·3	80·5	79·6	79·3	80·6	11 21	83·2	6 11	79·0
6	79·4	79·2	79·2	79·2	80·3	82·5	84·1	79·3	79·0	76·7	77·2	77·3	79·3	12 11	84·2	18 16	75·7
7	78·4	78·5	77·3	77·0	78·5	81·3	83·3	82·8	80·2	80·4	80·1	79·3	79·9	11 51	83·3	4 41	76·4
8	79·3	79·2	78·8	78·4	79·0	81·3	83·6	83·6	82·8	80·7	80·1	79·8	80·5	13 36	83·7	5 1	77·8
9	79·4	79·0	79·2	79·0	79·8	82·1	83·8	84·8	82·8	81·1	80·7	79·0	80·8	14 36	84·9	5 36	78·5
10	79·7	79·3	79·1	78·8	80·3	82·1	83·0	83·9	80·8	80·7	80·2	79·9	80·6	14 6	84·0	7 1	78·0
11	79·4	78·6	79·2	79·3	79·7	82·5	84·0	83·7	83·3	81·0	80·7	79·0	80·9	13 41	85·0	1 41	78·4
12	79·3	79·3	79·5	79·3	80·8	83·3	81·9	84·7	83·0	81·7	80·5	80·3	81·1	14 16	84·8	4 41	78·7
13	79·6	78·9	79·4	79·7	80·6	82·3	80·8	82·6	83·3	80·9	78·5	77·5	80·4	11 31	83·8	23 36	75·6
14	76·8	78·4	76·1	77·0	78·7	81·3	82·6	83·8	83·0	79·3	79·5	79·2	79·8	13 56	84·0	3 56	75·6
15	79·3	78·1	78·5	78·4	78·9	81·4	81·0	82·6	79·4	77·9	77·6	76·4	79·1	11 1	83·0	0 56	76·1
16	77·4	75·2	75·5	74·6	76·2	78·7	76·9	76·0	77·8	77·7	77·5	78·0	76·7	10 21	78·9	4 56	73·8
17	77·1	77·6	77·7	78·6	76·5	77·1	76·9	78·5	79·1	79·4	79·6	79·9	78·1	22 6	80·0	6 26	75·3
18	79·2	78·4	78·1	77·2	77·0	78·6	77·6	76·4	76·4	76·0	76·4	77·0	77·4	0 6	79·3	13 41	75·2
19	76·8	76·8	75·2	77·0	77·8	76·4	79·7	79·1	80·8	77·6	76·2	77·5	77·5	13 6	81·0	8 26	73·1
20	77·3	77·0	77·4	77·5	79·1	81·2	82·9	80·9	81·6	80·0	79·3	79·0	79·5	11 51	83·0	1 16	75·1
21	78·5	78·0	77·9	77·3	78·0	81·7	83·3	79·0	76·5	77·2	76·4	76·9	78·4	12 1	83·3	19 21	75·6
22	76·6	76·8	76·8	76·2	77·5	79·4	80·8	80·8	78·4	78·8	78·2	77·7	78·2	12 56	82·1	6 41	75·3
23	77·7	77·3	76·8	76·3	78·3	80·7	82·0	82·6	82·9	80·5	79·4	78·2	79·4	16 1	82·9	5 41	75·8
24	77·6	77·5	77·9	77·8	79·3	81·4	83·5	84·3	83·7	80·4	80·1	79·3	80·2	14 2	84·3	0 26	76·8
25	79·1	79·4	78·0	78·2	76·7	79·5	80·0	82·3	83·1	80·1	80·0	79·2	79·7	16 1	83·1	7 36	75·9
26	78·7	78·5	78·1	77·8	79·4	82·2	84·0	83·1	81·9	80·7	79·7	79·4	80·4	13 31	84·3	3 16	77·3
27	79·3	78·9	78·4	78·2	79·2	82·3	83·4	84·1	83·3	80·8	80·0	79·4	80·6	14 26	84·2	5 51	77·5
28	79·3	79·1	78·5	78·3	79·8	82·2	83·3	84·1	83·5	80·7	79·7	79·0	80·6	14 16	84·2	5 56	77·5
29	78·5	78·1	77·2	75·8	76·9	78·5	81·3	83·3	83·0	80·1	77·9	77·2	79·0	14 51	83·5	5 56	75·0
30	77·1	76·6	76·3	76·3	78·4	80·2	82·9	83·8	83·2	81·3	77·0	78·1	79·2	14 6	83·9	5 41	75·3
Mean	78·6	78·3	78·1	78·0	78·9	80·7	81·7	81·8	81·3	79·7	79·0	78·7	79·6	..	..	..	..

October.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.	Maximum. Time.	Mag.	Minimum. Time.	Mag
	°	°	°	°	°	°	°	°	°	°	°	°	°	H. M.	°	H. M.	°
1	77·4	77·0	76·8	77·2	78·7	81·7	84·2	85·8	85·6	83·6	82·5	82·0	81·4	13 26	85·8	2 36	74·9
2	80·8	79·5	78·4	78·7	80·0	83·4	86·3	87·7	87·2	84·0	82·8	82·5	82·6	14 56	87·8	4 1	77·9
3	81·1	80·0	78·7	77·5	79·3	83·3	86·5	87·3	87·2	84·0	82·2	81·6	82·3	12 51	88·2	6 41	76·3
4	79·9	78·8	78·1	77·3	80·8	83·7	85·6	86·9	86·7	84·0	82·6	82·2	82·3	14 51	87·4	6 11	76·9
5	81·0	80·1	78·7	79·3	81·6	84·2	86·8	87·4	86·6	82·7	81·1	80·2	82·4	13 56	87·6	5 1	78·6
6	79·5	78·7	78·3	78·0	80·7	83·8	86·4	86·5	86·0	84·2	83·7	81·4	82·3	14 56	87·1	5 36	76·8
7	80·7	81·3	80·4	79·1	80·7	84·3	86·8	86·9	86·8	84·6	83·3	82·5	83·1	14 11	87·6	5 51	78·1
8	81·7	82·5	81·7	80·4	82·0	84·5	88·0	87·7	86·1	84·3	83·5	82·3	83·7	12 1	88·0	5 41	79·3
9	80·7	80·2	80·2	80·1	81·3	83·9	87·1	90·2	87·1	84·1	82·2	82·2	83·3	13 51	90·3	4 21	78·7
10	82·5	82·0	81·7	80·9	82·5	86·2	86·7	88·4	88·0	85·6	83·4	81·6	84·1	14 56	89·3	6 36	80·3
11	80·7	80·4	80·5	80·0	81·1	83·2	85·1	83·3	83·7	81·9	80·1	79·4	81·6	12 51	85·2	6 46	79·0
12	79·5	79·0	78·3	78·2	79·2	79·8	81·3	82·2	81·8	79·6	78·7	78·6	79·5	14 21	82·3	6	77·6
13	78·3	77·8	77·5	77·0	79·4	82·0	84·0	84·9	84·5	82·2	82·0	81·6	81·0	14 21	85·0	5 11	76·4
14	81·2	79·9	79·3	79·4	81·3	83·3	85·2	85·6	84·5	82·5	81·9	81·3	82·1	13 26	86·1	4 56	78·2
15	80·8	80·5	80·1	78·8	81·1	82·7	84·9	85·5	84·0	81·3	80·8	80·3	81·7	13 56	85·6	6 1	78·1
16	79·8	78·7	77·6	77·3	79·3	81·7	84·0	84·5	83·9	81·3	80·2	79·9	80·7	14 16	85·5	5 56	76·7
17	78·5	77·2	77·4	76·8	79·3	82·2	83·8	83·7	81·9	81·0	81·5	80·8	80·4	11 11	83·9	5 51	76·0
18	80·7	79·9	78·8	78·7	80·5	82·9	86·0	87·3	86·1	83·1	81·8	81·2	82·2	14 1	87·3	6 26	78·0
19	80·9	80·3	79·5	79·7	81·5	83·9	87·9	88·1	87·2	83·5	82·2	81·5	83·0	13 26	89·0	5 6	78·5
20	80·6	80·4	79·7	79·3	81·3	84·8	89·4	89·0	87·1	84·0	83·3	82·6	83·5	12 36	89·7	5 6	78·8
21	82·2	81·2	80·8	80·5	82·3	85·7	87·4	86·9	85·8	83·6	82·8	82·5	83·3	12 6	87·5	5 11	78·7
22	81·6	82·0	81·4	79·3	81·2	85·3	89·0	89·2	87·1	83·6	82·8	82·0	83·8	12 46	89·7	5 56	78·6
23	81·0	81·2	80·8	80·6	80·7	83·5	87·3	89·0	85·9	83·4	82·8	80·9	83·0	13 36	89·1	0 46	80·2
24	79·7	79·4	79·1	78·1	80·5	84·3	88·4	90·7	88·1	84·6	83·1	81·1	83·1	14 1	90·7	6 1	77·3
25	79·0	78·5	78·1	77·8	79·8	84·3	86·6	86·9	86·2	83·7	83·0	81·2	82·1	13 26	87·2	3 41	76·8
26	79·1	78·6	79·6	77·0	79·5	83·6	86·2	85·5	84·3	82·2	82·5	80·9	81·7	11 31	87·4	6 21	76·8
27	81·0	81·3	80·8	79·7	81·2	85·1	90·1	88·7	86·9	82·8	81·9	80·7	83·3	12 41	90·4	6 26	78·6
28	78·8	79·1	77·2	77·1	78·8	84·0	88·4	90·5	90·6	82·8	81·4	80·1	82·4	15 1	91·0	4 16	76·3
29	78·7	78·1	77·3	74·9	76·9	81·2	86·3	89·1	88·6	81·9	80·2	76·6	80·7	15 31	90·8	5 56	74·3
30	75·6	75·8	75·4	74·3	77·1	82·1	87·4	90·5	85·2	79·0	78·7	77·0	79·9	14 36	90·6	4 56	73·5
31	74·8	73·5	73·6	73·2	76·2	81·5	88·1	91·3	85·2	80·8	79·3	77·9	79·6	14 26	91·4	6 21	72·2
Mean	79·9	79·4	78·9	78·3	80·2	83·4	86·5	87·3	86·0	82·9	81·9	80·9	82·1	..	..	..	..

The daily means are derived from 24 hourly values.

Bi-hourly values of air temperature, 1921 (in degrees Fahrenheit).

November.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.	Maximum. Time.		Maximum. Mag.	Minimum. Time.		Minimum. Mag.
	°	°	°	°	°	°	°	°	°	°	°	°	°	H.	M.	°	H.	M.	°
1	75·6	74·2	74·7	74·4	76·9	83·3	87·5	87·9	84·3	80·4	78·8	78·5	79·8	13	26	89·4	5	56	73·5
2	77·6	77·5	77·4	77·5	79·2	82·3	83·5	85·6	83·9	81·3	79·7	78·8	80·4	13	36	85·7	3	41	76·1
3	77·7	76·5	76·7	76·0	78·1	83·9	86·4	85·8	85·6	82·3	81·5	80·0	80·9	11	36	86·5	6	26	75·2
4	78·8	77·2	77·3	77·9	79·7	82·5	85·4	85·2	83·7	81·0	79·7	78·7	80·6	12	36	86·4	2	16	76·4
5	78·7	79·0	78·2	77·2	79·3	83·0	84·0	85·1	83·9	81·0	80·1	79·0	80·7	14	21	85·4	5	41	76·7
6	77·2	77·7	76·7	75·5	77·8	81·5	83·6	83·9	83·3	80·8	79·7	77·9	79·5	14	16	84·0	5	56	75·0
7	76·7	74·4	73·9	74·1	75·7	80·7	82·0	82·9	81·6	79·1	78·6	76·4	77·9	13	1	83·4	4	46	73·2
8	75·1	74·9	74·6	74·3	75·9	79·0	82·1	84·1	83·3	80·3	79·4	77·0	78·4	14	46	84·5	4	26	72·8
9	76·8	76·7	75·6	75·0	75·5	79·6	84·8	84·8	83·3	80·4	79·9	76·8	79·1	13	21	85·1	6	36	74·2
10	75·5	74·7	73·7	72·5	76·3	81·0	85·5	86·2	82·9	80·0	78·7	78·4	78·9	13	6	88·7	5	56	71·8
11	76·9	75·8	73·6	73·3	74·1	78·9	83·4	86·6	84·2	80·4	78·8	76·2	78·4	13	36	86·7	6	36	72·4
12	74·3	74·2	73·6	74·0	75·6	80·3	85·9	87·9	85·1	80·6	78·9	77·9	79·0	14	41	88·7	6	30	72·6
13	74·9	74·1	73·6	72·7	75·2	79·9	83·3	84·4	83·4	80·2	78·7	76·1	78·0	14	36	84·5	5	36	71·4
14	75·0	73·9	73·5	72·0	73·5	77·8	82·3	84·9	83·7	80·0	78·7	77·0	77·7	14	6	85·0	6	26	71·0
15	75·1	73·8	73·4	71·7	73·8	79·6	84·1	85·9	84·2	80·0	78·5	76·0	78·0	13	11	86·3	6	21	71·0
16	75·0	74·1	73·3	72·5	75·0	79·8	84·0	85·7	83·5	79·7	78·1	75·2	78·0	14	6	85·8	5	56	71·8
17	73·6	73·6	73·0	72·1	74·7	79·6	83·3	84·8	84·0	80·2	78·2	76·8	77·8	13	16	84·9	5	51	71·3
18	74·9	74·1	73·6	71·8	74·1	77·8	81·6	83·1	82·0	79·0	78·3	77·1	77·3	13	46	83·3	5	16	70·9
19	76·8	76·4	74·6	73·3	74·3	78·0	81·1	82·3	81·8	78·8	77·8	76·7	77·7	13	36	82·4	5	46	72·6
20	74·9	75·0	74·4	73·4	75·3	80·6	86·2	88·0	85·5	81·0	79·3	77·2	79·2	13	11	88·2	6	26	72·2
21	75·9	76·4	74·9	74·3	76·5	81·2	87·7	86·0	82·9	80·1	79·3	76·8	79·4	13	1	89·3	5	41	73·4
22	75·5	74·7	74·9	74·8	76·7	80·1	84·9	84·4	83·0	80·3	79·0	76·0	78·6	11	56	84·9	5	6	74·1
23	75·5	73·9	72·2	72·6	74·0	77·8	82·7	83·9	83·7	80·2	77·4	75·9	77·5	15	6	84·8	6	26	71·1
24	74·5	72·8	72·8	72·0	73·4	78·2	83·0	84·5	84·1	80·2	77·9	77·5	77·5	15	1	84·9	6	16	71·4
25	76·1	74·3	73·5	72·7	73·3	77·7	82·6	84·1	83·6	80·2	77·8	76·3	77·7	14	46	84·4	5	21	72·1
26	76·4	74·4	73·8	72·9	74·8	79·2	84·4	85·9	84·2	80·4	78·8	77·3	78·5	14	21	86·4	6	26	72·0
27	75·4	75·0	73·3	72·8	73·9	77·7	83·5	84·4	83·6	80·0	78·8	75·8	77·9	12	46	84·6	6	26	71·7
28	76·5	74·2	73·5	73·0	75·0	79·6	84·6	85·0	84·0	80·4	78·4	76·3	78·4	12	51	85·2	5	26	72·3
29	75·6	75·2	73·8	71·9	73·6	78·8	83·1	85·7	84·0	79·9	78·4	76·1	78·0	14	16	85·8	6	16	70·5
30	75·6	74·8	73·1	72·6	73·4	78·8	83·6	86·2	83·3	79·6	78·8	76·4	78·0	13	46	86·4	6	36	71·5
Mean	77·9	75·1	74·4	73·7	75·5	79·9	84·0	85·2	83·7	80·3	78·9	77·1	78·6	..		..	..		..

December.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.	Maximum. Time.		Maximum. Mag.	Minimum. Time.		Minimum. Mag.
	°	°	°	°	°	°	°	°	°	°	°	°	°	H.	M.	°	H.	M.	°
1	73·4	72·9	72·4	71·1	73·2	77·5	82·2	85·0	83·0	79·2	77·9	76·0	77·0	13	46	85·1	5	51	70·4
2	73·7	72·7	73·4	72·3	73·3	78·0	82·9	85·3	82·6	79·1	77·5	74·3	77·1	14	6	85·4	6	26	71·0
3	73·4	73·9	72·8	71·3	72·8	77·1	81·7	84·2	83·0	79·4	77·4	76·1	76·9	13	31	84·4	5	46	70·8
4	75·6	74·4	73·8	72·9	73·9	79·2	83·7	83·7	83·3	79·5	77·8	76·0	77·8	13	41	84·2	5	31	71·9
5	75·4	74·6	74·1	73·5	74·3	79·6	83·7	84·3	83·3	79·8	77·9	76·4	78·0	15	6	84·6	6	36	72·1
6	75·5	74·1	73·8	73·2	75·4	79·9	84·5	84·3	82·6	79·7	78·8	76·5	78·2	12	56	85·9	2	56	71·9
7	74·7	73·7	73·2	73·0	74·3	78·1	82·7	84·2	82·6	79·4	78·2	74·5	77·3	14	31	84·6	6	41	72·0
8	74·3	74·7	73·7	73·7	74·0	78·2	79·5	81·3	81·1	79·3	78·5	76·6	76·9	14	16	81·7	6	6	72·5
9	75·7	75·0	75·3	74·2	75·3	78·5	82·8	84·6	81·4	79·0	78·2	76·1	78·0	14	46	84·7	5	46	73·3
10	75·0	75·0	74·0	73·5	74·8	79·8	85·5	86·5	81·9	79·9	79·0	77·3	78·5	13	46	88·8	6	16	72·5
11	75·9	75·5	74·7	74·5	76·2	79·9	85·4	86·8	82·6	79·7	78·5	75·9	78·8	13	36	88·3	6	36	73·5
12	75·3	73·9	73·0	72·9	73·5	77·5	82·5	83·3	81·7	78·7	77·9	75·2	77·1	13	21	84·2	4	11	71·9
13	72·7	71·5	70·6	70·5	70·9	75·0	79·6	83·4	82·8	78·0	75·7	72·8	75·3	14	16	83·6	6	31	69·0
14	72·1	70·7	71·1	69·5	71·3	75·3	80·1	82·7	81·1	78·1	76·8	75·1	75·4	14	16	82·8	6	16	68·8
15	71·3	73·3	71·6	70·1	72·4	76·1	80·0	81·0	79·8	76·7	75·6	74·6	75·3	14	31	81·6	6	1	69·5
16	72·9	72·4	72·3	70·7	72·4	77·9	81·9	83·8	81·5	78·1	76·6	74·6	76·3	14	41	84·6	6	6	70·0
17	73·6	72·9	71·8	71·4	71·4	76·1	81·5	82·8	82·6	78·1	75·8	73·2	76·0	14	43	83·7	7	6	68·8
18	74·3	72·5	71·8	71·0	71·1	76·8	81·6	84·8	83·5	79·6	77·0	74·4	76·5	14	21	85·0	6	36	68·8
19	74·3	74·3	73·0	71·5	72·7	77·0	83·9	83·7	82·9	79·0	76·5	74·7	76·9	12	51	84·8	6	51	70·3
20	74·1	74·1	72·4	72·1	72·5	76·2	81·2	83·2	81·0	78·1	76·7	74·5	76·3	13	51	83·3	6	56	70·8
21	72·8	73·0	72·1	71·3	72·7	76·0	79·0	79·5	78·4	76·7	75·8	75·3	75·2	13	36	79·7	6	11	70·6
22	72·4	72·3	72·1	70·9	72·0	76·2	79·2	79·7	78·4	76·4	75·8	74·6	74·9	13	31	79·9	7	16	68·8
23	72·1	71·3	71·0	70·9	72·8	76·5	79·0	79·6	78·8	76·4	74·7	75·0	74·6	14	16	79·8	5	26	70·2
24	73·8	72·1	69·8	68·8	70·5	75·7	79·4	80·3	78·6	76·4	75·5	73·5	74·5	14	1	80·3	5	56	68·3
25	71·7	70·4	70·3	69·8	71·7	77·2	84·0	82·3	80·3	77·5	76·7	74·8	75·5	12	11	84·1	6	56	68·7
26	73·0	71·9	71·4	70·6	72·3	76·7	81·2	82·6	81·7	78·0	77·4	74·5	76·0	14	21	83·0	5	11	69·0
27	73·0	72·0	71·6	72·0	73·2	79·3	84·5	84·6	82·0	78·6	76·9	74·2	76·9	13	36	85·6	4	11	71·0
28	73·0	72·8	71·3	71·0	72·1	77·0	81·0	82·8	82·3	77·9	76·1	73·2	75·8	13	56	82·9	4	31	70·0
29	73·5	71·8	72·0	70·7	71·6	75·6	79·3	80·4	79·9	77·0	76·1	74·4	75·2	14	16	80·5	6	36	69·5
30	74·3	73·4	71·8	69·2	70·4	76·4	80·1	80·6	78·9	76·0	75·1	72·5	74·8	13	51	80·9	6	36	67·5
31	70·4	70·9	69·3	69·1	70·1	75·2	78·4	79·2	78·2	75·5	74·6	73·6	73·7	15	11	79·5	6	56	67·3
Mean	73·7	73·0	72·3	71·5	72·7	77·2	81·7	82·9	81·3	78·2	76·9	74·8	76·4	..		..	..		..

The daily means are derived from 24 hourly values.

Bi-hourly values of relative humidity, 1921. (*The figures represent percentages.*)

January.

Date.	HOURS.												Mean.
	0	2	4	6	8	10	12	14	16	18	20	22	
1 ..	65	60	62	58	57	63	48	50	58	65	65	69	59·4
2 ..	66	58	61	66	67	60	47	52	57	71	77	66	63·0
3 ..	78	73	79	76	71	63	38	57	70	78	64	66	67·6
4 ..	72	82	78	75	75	68	40	55	61	73	68	60	67·4
5 ..	55	72	73	71	69	62	32	59	68	72	64	49	61·8
6 ..	59	67	62	78	65	63	42	65	66	80	79	77	68·0
7 ..	86	87	82	80	75	67	51	63	67	75	77	81	73·5
8 ..	83	83	86	77	74	66	60	69	72	80	81	80	74·5
9 ..	78	61	60	63	68	62	55	62	70	77	73	63	66·1
10 ..	74	79	77	84	74	64	52	59	60	74	79	79	71·3
11 ..	69	82	87	80	77	66	59	53	66	73	76	79	72·5
12 ..	79	76	72	77	76	69	54	55	57	59	58	58	65·1
13 ..	68	61	66	75	60	41	45	54	45	48	52	63	57·1
14 ..	59	65	68	76	76	55	64	62	65	64	67	70	66·1
15 ..	65	56	54	62	54	62	57	65	69	73	72	73	63·2
16 ..	74	67	58	69	62	56	54	59	62	60	67	66	62·6
17 ..	56	53	52	45	47	36	55	54	60	68	67	63	55·6
18 ..	56	52	52	49	49	55	55	61	65	71	72	72	59·8
19 ..	69	72	63	62	62	62	59	63	72	81	84	85	69·8
20 ..	87	89	90	90	89	81	73	72	71	76	76	78	80·6
21 ..	77	60	51	55	50	39	43	38	32	41	50	44	47·0
22 ..	42	43	57	65	56	48	32	35	37	56	51	59	47·4
23 ..	51	56	62	50	56	44	45	49	55	63	60	57	53·3
24 ..	60	58	55	60	55	43	32	60	58	65	72	73	57·3
25 ..	75	75	54	49	51	48	32	28	65	70	72	67	58·0
26 ..	79	77	75	72	73	55	46	46	59	73	75	55	65·3
27 ..	77	80	69	72	62	51	51	57	56	72	68	47	61·7
28 ..	50	61	66	68	70	62	51	61	66	63	79	64	63·5
29 ..	67	77	56	55	65	53	55	65	66	68	73	59	62·7
30 ..	64	68	75	74	54	69	57	64	61	66	58	57	63·5
31 ..	53	75	67	68	62	64	56	58	64	68	69	77	65·3
Mean ..	67·5	68·5	66·7	67·8	64·5	58·0	49·7	56·5	61·3	68·5	69·2	66·3	63·6

The highest hourly value during the month .. 90
The lowest " " " .. 28

February.

Date.	HOURS.												Mean.
	0	2	4	6	8	10	12	14	16	18	20	22	
1 ..	78	68	73	55	67	59	54	61	66	64	65	66	63·6
2 ..	61	55	51	62	56	49	46	59	54	64	72	77	59·7
3 ..	76	85	87	86	82	76	73	70	72	73	80	83	78·7
4 ..	85	85	86	85	76	61	51	50	57	65	66	66	69·2
5 ..	64	75	78	76	77	69	51	52	55	62	60	63	65·9
6 ..	67	68	78	76	76	68	59	54	55	59	62	65	65·4
7 ..	66	73	82	82	74	65	59	55	58	64	66	72	67·4
8 ..	69	64	67	79	72	63	60	57	48	48	57	43	60·7
9 ..	41	51	48	41	51	45	46	57	64	66	67	69	53·9
10 ..	75	78	82	75	68	62	52	59	65	65	68	75	68·7
11 ..	75	83	74	74	73	67	72	70	72	80	87	87	75·9
12 ..	88	88	88	89	88	74	65	62	58	65	71	74	75·2
13 ..	74	75	73	72	68	62	64	60	49	50	57	69	64·0
14 ..	72	75	73	67	58	53	51	52	51	49	52	43	57·1
15 ..	41	37	57	51	55	43	26	46	59	66	70	67	51·1
16 ..	69	75	66	57	57	40	42	23	59	57	55	70	54·7
17 ..	80	79	74	71	68	40	50	46	55	62	66	72	62·7
18 ..	53	65	81	71	58	55	57	58	63	69	72	62	64·8
19 ..	66	60	60	73	73	53	54	60	66	77	81	83	66·4
20 ..	88	91	89	87	65	65	48	59	62	75	80	85	74·0
21 ..	88	90	79	81	67	54	57	59	66	72	75	78	71·9
22 ..	85	87	87	77	79	64	57	62	66	77	81	84	75·5
23 ..	71	74	68	59	71	57	53	59	70	68	74	78	67·7
24 ..	83	83	78	57	75	61	59	62	65	69	56	58	67·8
25 ..	67	83	75	83	61	51	63	66	71	80	88	89	74·1
26 ..	90	90	90	93	88	78	69	65	63	73	81	87	80·0
27 ..	87	79	85	89	89	64	53	53	49	51	68	58	68·3
28 ..	70	69	70	77	75	63	62	47	51	60	64	75	64·9
Mean ..	72·5	74·5	75·0	73·0	70·2	59·3	55·5	56·5	60·1	65·4	69·3	71·4	66·8

The highest hourly value during the month .. 91
The lowest " " " .. 22

The daily means are derived from 24 hourly values.

Bi-hourly values of relative humidity, 1921. (The figures represent percentages.)

March.

Date.	HOURS.												Mean.
	0	2	4	6	8	10	12	14	16	18	20	22	
1 ..	77	84	86	89	85	77	73	69	65	73	62	64	74·9
2 ..	55	57	54	57	54	50	50	57	56	55	64	62	55·9
3 ..	55	69	76	64	50	42	44	47	44	52	54	54	55·7
4 ..	73	77	80	60	50	53	35	51	53	65	72	75	62·7
5 ..	75	80	84	87	77	76	75	74	75	82	86	89	79·6
6 ..	87	88	89	92	87	79	75	75	77	82	86	88	82·5
7 ..	90	90	86	88	86	77	74	73	74	80	83	87	82·4
8 ..	87	89	89	90	89	74	64	63	67	73	78	84	78·9
9 ..	85	86	84	86	79	72	66	70	66	68	74	74	75·4
10 ..	72	68	70	73	76	66	62	61	62	69	73	77	68·7
11 ..	77	77	78	85	79	72	67	66	63	70	81	84	74·7
12 ..	82	80	84	85	79	63	66	59	54	62	66	65	70·7
13 ..	77	73	70	74	77	64	64	67	54	56	64	74	67·6
14 ..	75	81	81	73	69	69	68	68	65	73	70	72	71·0
15 ..	54	74	67	62	60	48	67	60	68	76	83	83	67·3
16 ..	83	89	90	86	84	70	50	67	68	69	74	81	76·5
17 ..	83	82	84	79	78	75	66	61	63	66	68	76	73·9
18 ..	83	78	78	79	75	63	59	61	62	67	74	80	71·0
19 ..	82	84	87	87	85	73	62	58	63	73	76	81	75·5
20 ..	84	81	80	84	81	71	62	65	65	73	79	80	75·3
21 ..	80	79	80	83	80	70	66	68	67	70	73	78	74·2
22 ..	68	79	78	74	78	67	64	50	50	70	67	60	67·6
23 ..	72	79	77	82	80	66	69	60	65	74	76	76	73·0
24 ..	78	77	79	81	75	70	59	55	58	54	51	65	66·0
25 ..	67	73	77	82	70	53	62	60	52	52	55	49	62·2
26 ..	59	73	40	60	55	47	47	65	70	63	54	55	58·0
27 ..	81	74	80	83	80	75	69	66	68	78	82	85	76·5
28 ..	84	87	87	88	82	75	69	50	56	62	67	75	73·8
29 ..	79	77	66	75	75	70	70	58	64	77	77	64	71·0
30 ..	67	70	68	70	60	52	45	55	52	64	71	75	62·8
31 ..	80	80	80	83	73	66	66	63	64	68	75	77	72·5
Mean ..	75·8	78·5	77·7	78·7	75·0	66·0	62·4	62·0	62·3	68·3	71·5	73·8	70·9

The highest hourly value during the month .. 92
The lowest " " " " .. 35
The daily means are derived from 24 hourly values.

April.

Date.	HOURS.												Mean
	0	2	4	6	8	10	12	14	16	18	20	22	
1 ..	78	85	86	83	80	62	61	66	69	76	82	82	75·6
2 ..	81	81	84	82	81	76	62	65	64	74	78	83	76·0
3 ..	86	86	83	85	82	76	64	68	73	81	84	86	79·9
4 ..	88	86	89	87	86	74	66	73	71	78	80	84	79·6
5 ..	81	84	83	85	86	76	71	72	72	79	82	85	79·3
6 ..	86	86	88	91	87	65	54	63	73	79	86	89	78·2
7 ..	86	86	84	87	86	76	68	70	74	79	83	83	79·7
8 ..	80	81	85	88	78	73	69	68	70	77	82	85	77·7
9 ..	82	80	84	92	79	72	61	61	67	71	78	80	75·6
10 ..	79	76	81	84	80	68	71	69	67	73	73	81	75·2
11 ..	82	79	84	86	78	71	68	68	67	71	76	80	75·1
12 ..	81	81	81	86	81	74	66	66	68	69	74	79	75·4
13 ..	82	82	87	85	82	76	67	66	69	70	72	76	76·2
14 ..	77	77	76	82	81	72	67	61	64	75	80	82	74·9
15 ..	76	75	75	75	77	66	58	56	62	74	77	79	71·4
16 ..	81	81	81	81	79	67	64	64	66	74	79	78	74·2
17 ..	79	75	79	80	78	69	62	63	68	75	79	83	73·8
18 ..	78	82	81	84	77	68	62	65	66	75	74	79	73·4
19 ..	76	77	79	83	73	69	57	54	57	66	73	70	68·3
20 ..	71	72	71	74	68	70	68	66	68	76	81	82	72·5
21 ..	84	84	82	87	78	76	71	72	74	76	78	78	77·4
22 ..	79	81	84	84	71	72	63	63	65	70	79	81	74·0
23 ..	71	79	82	83	78	74	65	68	66	76	79	85	75·8
24 ..	81	86	84	83	77	69	66	69	73	78	83	88	78·1
25 ..	85	86	83	86	81	74	70	73	80	79	81	83	79·1
26 ..	71	81	82	80	74	67	59	59	61	66	72	81	71·1
27 ..	82	80	83	81	75	70	68	68	67	*	*	84	..
28 ..	*	*	*	89	83	76	70	55	53	64	66	66	..
29 ..	73	77	77	79	68	57	51	48	55	64	63	68	64·6
30 ..	74	76	77	82	78	70	66	67	73	75	79	82	74·9
Mean ..	79·6	80·8	81·9	83·7	78·7	70·7	64·2	65·1	67·9	74·1	78·1	81·1	75·2

The highest hourly value during the month .. 92
The lowest " " " " .. 48
*Thermograph curves lost.

Bi-hourly values of relative humidity, 1921. (The figures represent percentages).

May.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.
1 ..	84	85	85	86	81	72	68	65	69	78	80	80	77·4
2 ..	81	79	78	81	78	70	65	66	66	76	81	81	75·0
3 ..	79	79	78	77	73	66	64	63	62	68	73	75	71·7
4 ..	77	78	78	78	70	67	64	63	65	67	70	73	70·7
5 ..	75	77	77	79	72	67	61	63	65	72	78	73	72·0
6 ..	82	81	82	84	78	73	64	66	66	75	79	80	75·7
7 ..	81	81	82	82	76	69	63	61	63	68	71	73	72·2
8 ..	73	74	77	78	75	68	60	59	60	67	73	75	70·2
9 ..	75	77	79	81	73	68	63	61	62	70	75	78	71·9
10 ..	76	75	80	82	77	68	63	58	62	68	74	77	74·5
11 ..	78	80	81	82	77	70	66	59	57	65	75	79	74·7
12 ..	77	81	82	82	77	69	65	64	66	69	75	78	73·6
13 ..	80	81	80	82	75	72	64	64	65	72	79	81	73·1
14 ..	83	82	82	82	76	69	66	63	70	78	79	80	75·7
15 ..	81	82	82	83	76	68	63	64	66	73	75	77	73·3
16 ..	76	77	75	75	70	63	64	60	59	68	69	70	69·2
17 ..	71	74	70	73	66	61	56	56	57	66	69	71	65·9
18 ..	69	75	76	77	71	66	62	61	63	69	72	73	69·4
19 ..	72	73	71	73	68	61	59	59	60	66	70	68	66·6
20 ..	71	71	72	73	67	61	59	60	60	67	69	73	66·5
21 ..	73	76	75	76	70	63	61	60	63	69	72	75	69·3
22 ..	75	74	75	74	71	66	60	58	63	68	72	74	68·9
23 ..	74	74	75	75	70	64	60	58	59	65	66	70	67·0
24 ..	69	69	68	69	64	60	56	56	59	66	69	69	64·7
25 ..	68	71	71	72	66	60	57	59	59	67	69	68	65·7
26 ..	71	73	73	73	66	65	64	60	61	68	72	71	67·9
27 ..	70	70	73	71	66	58	55	54	58	63	67	69	64·2
28 ..	68	69	67	67	65	58	56	56	58	65	68	70	63·7
29 ..	72	74	72	73	68	61	58	57	60	67	70	70	66·6
30 ..	73	73	75	74	68	62	61	60	60	67	70	73	67·7
31 ..	74	75	75	75	73	66	61	59	61	67	70	73	69·0
Mean ..	75·1	76·1	76·3	76·0	71·7	65·5	60·8	60·4	62·1	68·8	72·6	74·1	69·9

The highest hourly value during the month .. 86
The lowest „ „ „ „ .. 54

June.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Mean
1 ..	75	75	79	77	72	69	63	65	64	70	74	76	71·5
2 ..	78	77	78	79	76	68	63	65	66	71	74	74	72·3
3 ..	76	75	76	77	73	71	75	61	68	71	75	79	73·2
4 ..	79	79	75	82	73	69	68	61	68	70	77	75	72·9
5 ..	76	83	79	75	72	78	63	61	67	74	73	74	73·0
6 ..	76	81	78	80	76	68	62	63	63	70	76	76	72·0
7 ..	75	76	77	79	76	64	64	60	66	68	73	73	70·3
8 ..	74	76	77	76	71	64	60	59	63	70	74	74	69·9
9 ..	76	74	77	83	74	68	65	68	73	73	78	77	73·7
10 ..	83	83	83	83	83	75	73	76	84	80	86	84	81·6
11 ..	86	89	87	87	91	89	91	84	83	85	90	93	87·4
12 ..	89	89	89	90	85	85	85	83	79	80	82	84	84·0
13 ..	87	90	93	94	94	82	83	85	83	81	82	84	86·4
14 ..	88	86	93	91	89	83	81	81	80	87	83	83	85·7
15 ..	88	85	82	89	86	85	81	82	87	90	89	84	86·4
16 ..	87	86	84	87	88	87	82	79	79	82	85	83	84·2
17 ..	85	88	87	90	82	79	77	92	91	89	88	90	86·8
18 ..	87	87	91	85	91	91	91	93	93	93	92	92	90·0
19 ..	92	91	91	90	94	93	91	92	89	89	90	93	91·2
20 ..	91	88	86	91	91	82	85	89	89	93	94	94	89·7
21 ..	93	91	87	87	87	83	81	78	82	80	82	83	84·0
22 ..	82	81	82	85	81	76	76	72	78	79	81	82	79·6
23 ..	82	84	83	82	81	78	75	74	73	77	80	82	78·7
24 ..	83	84	83	82	77	74	72	70	74	76	78	78	77·1
25 ..	82	81	80	81	80	78	71	71	74	77	77	78	77·0
26 ..	80	79	80	81	79	74	71	71	69	73	77	77	76·1
27 ..	79	79	79	80	76	72	69	68	72	71	75	76	74·4
28 ..	77	79	79	75	77	67	67	69	69	68	79	77	74·7
29 ..	79	79	79	79	77	76	74	72	78	75	75	76	76·7
30 ..	79	81	80	75	77	77	68	76	70	74	77	79	76·0
Mean ..	82·1	82·3	82·5	83·1	81·0	76·8	74·2	74·0	75·8	77·9	80·5	80·3	79·2

The higest hourly value during the month .. 94
The lowest „ „ „ „ .. 59

The daily means are derived from 24 hourly values.

Bi-hourly values of relative humidity, 1921. (*The figures represent percentages*).

July.

Date.	HOURS.												Mean.
	0	2	4	6	8	10	12	14	16	18	20	22	
1 ..	86	89	89	90	82	77	71	73	74	78	82	78	80·8
2 ..	78	80	83	85	82	79	76	75	73	71	81	81	78·4
3 ..	79	80	79	81	77	78	69	73	74	72	76	77	75·8
4 ..	77	79	77	81	72	73	68	65	70	73	76	77	74·0
5 ..	76	76	79	84	75	76	69	73	70	72	75	76	75·2
6 ..	76	77	77	79	75	72	67	68	69	75	75	76	73·2
7 ..	78	76	77	79	78	89	84	83	88	90	88	87	83·4
8 ..	87	87	88	88	86	87	84	85	91	86	91	92	87·2
9 ..	90	87	86	90	84	85	82	83	77	77	80	84	83·1
10 ..	78	83	83	85	82	78	76	74	71	75	78	81	79·3
11 ..	86	83	87	89	86	86	81	82	81	82	81	90	84·7
12 ..	91	91	89	91	91	91	91	93	92	91	91	93	91·2
13 ..	88	93	91	91	90	89	84	81	83	80	82	85	86·7
14 ..	87	91	92	91	91	87	84	80	80	83	85	86	86·2
15 ..	90	90	93	92	88	87	88	92	86	84	88	87	89·0
16 ..	85	89	89	87	91	82	80	82	81	81	82	85	84·9
17 ..	91	84	88	91	89	89	88	83	82	91	94	91	88·5
18 ..	94	88	92	93	92	93	90	86	86	88	92	91	89·8
19 ..	93	93	94	94	93	92	85	87	87	88	92	95	90·8
20 ..	88	88	91	94	94	92	88	90	88	87	90	92	90·3
21 ..	92	94	93	93	91	92	94	89	89	85	90	88	90·4
22 ..	89	89	91	89	86	90	94	90	91	91	92	90	89·9
23 ..	87	91	90	91	93	94	94	93	94	92	92	93	92·1
24 ..	95	92	93	92	91	88	87	91	90	93	92	93	91·1
25 ..	91	88	91	89	91	87	89	88	85	87	89	88	88·5
26 ..	87	87	90	94	94	93	88	91	90	92	93	91	90·4
27 ..	88	86	92	93	90	89	88	88	89	90	89	86	88·7
28 ..	91	89	86	86	88	84	88	91	85	85	88	87	86·9
29 ..	89	88	89	87	88	91	86	86	88	88	89	89	88·3
30 ..	90	90	90	87	86	87	84	86	84	82	84	87	86·5
31 ..	85	85	89	87	86	86	83	83	86	84	87	92	85·7
Mean ..	86·5	86·5	87·7	88·5	86·5	85·9	83·2	83·4	83·0	83·6	85·9	86·7	85·5

The highest hourly value during the month .. 95
The lowest " " " " .. 65

August.

Date.	HOURS.												Mean.
	0	2	4	6	8	10	12	14	16	18	20	22	
1 ..	89	86	87	82	87	85	79	82	85	84	85	86	84·1
2 ..	85	86	85	87	87	84	81	81	83	84	89	85	85·0
3 ..	93	90	89	91	89	85	85	83	85	86	82	85	86·9
4 ..	84	86	88	83	82	83	79	79	80	83	82	86	83·0
5 ..	84	82	85	92	88	88	82	84	81	84	86	88	85·1
6 ..	89	92	92	94	88	86	89	91	92	93	86	90	89·7
7 ..	87	91	90	85	83	84	87	84	83	85	88	86	86·0
8 ..	85	86	89	86	85	87	84	85	86	89	87	91	87·0
9 ..	90	93	92	92	95	96	94	94	94	89	89	92	92·6
10 ..	90	91	92	94	89	92	87	82	82	84	83	86	87·3
11 ..	84	84	84	81	85	86	84	82	78	82	87	84	84·0
12 ..	89	85	83	81	81	86	79	82	77	84	84	87	83·2
13 ..	84	84	83	83	83	87	82	84	85	87	86	88	84·7
14 ..	85	89	84	85	85	84	82	79	84	86	88	87	84·8
15 ..	85	82	88	87	91	89	85	81	80	86	85	84	85·2
16 ..	90	88	83	84	91	89	84	82	79	88	86	87	85·4
17 ..	84	87	91	87	85	83	86	85	88	87	85	87	86·0
18 ..	89	91	89	85	89	87	88	89	84	90	84	89	87·6
19 ..	90	90	92	89	88	86	85	87	85	86	92	86	88·4
20 ..	85	89	91	90	86	84	81	78	77	81	84	83	84·1
21 ..	84	85	86	86	85	80	79	79	81	79	82	85	83·0
22 ..	87	91	91	92	94	88	81	80	79	81	84	84	85·5
23 ..	84	85	80	80	81	77	76	75	76	85	81	81	80·0
24 ..	91	90	90	84	80	76	74	72	72	76	79	81	80·4
25 ..	82	81	84	84	89	86	82	74	73	78	82	81	81·2
26 ..	78	80	81	83	90	84	76	77	81	81	81	87	81·4
27 ..	80	80	83	81	81	79	76	78	72	78	79	80	78·5
28 ..	81	81	82	84	82	90	78	75	71	78	84	83	81·0
29 ..	91	82	81	81	81	79	76	75	76	77	78	81	79·4
30 ..	77	79	83	84	80	84	76	80	82	75	80	79	79·5
31 ..	80	78	76	83	88	80	79	75	74	76	81	83	79·3
Mean ..	85·7	85·9	86·3	85·8	86·1	85·0	81·8	81·1	80·8	83·3	84·2	85·2	84·2

The highest hourly value during the month .. 96
The lowest " " " " .. 71

The daily means are derived from 24 hourly values.

Bi-hourly values of relative humidity, 1921. (*The figures represent percentages.*)

September.

Date.	HOURS.												Mean.
	0	2	4	6	8	10	12	14	16	18	20	22	
1 ..	82	82	83	79	82	78	80	78	78	86	91	83	81·7
2 ..	88	87	83	76	81	81	85	92	81	81	78	78	82·9
3 ..	79	78	81	78	74	86	78	79	81	79	77	82	79·7
4 ..	81	79	82	83	81	86	81	78	76	78	81	83	80·7
5 ..	82	82	83	84	83	86	86	83	78	77	81	81	82·1
6 ..	83	82	84	85	81	78	76	87	87	91	87	86	84·0
7 ..	88	83	92	94	87	86	82	83	83	82	86	86	86·0
8 ..	85	83	84	86	88	85	79	77	79	83	81	82	82·2
9 ..	81	83	83	82	81	78	76	76	81	79	84	82	80·2
10 ..	82	85	83	84	84	80	81	78	85	80	83	81	82·7
11 ..	81	83	81	84	81	81	74	76	74	78	75	84	79·4
12 ..	84	83	82	86	82	78	78	74	76	76	81	82	80·1
13 ..	81	85	84	84	81	82	85	78	74	81	85	84	81·7
14 ..	87	81	86	91	84	81	82	76	74	85	82	83	81·3
15 ..	81	81	83	84	89	81	81	78	78	83	85	88	83·3
16 ..	89	91	94	93	94	92	85	90	92	89	93	92	91·7
17 ..	93	91	87	87	95	93	94	91	86	86	84	87	90·0
18 ..	85	88	92	91	87	92	94	92	88	88	88	86	89·3
19 ..	85	88	91	88	87	94	84	86	85	83	91	87	87·4
20 ..	91	89	87	86	83	78	75	76	77	82	81	84	82·2
21 ..	85	83	86	86	84	79	76	84	89	86	88	92	85·0
22 ..	92	90	92	90	91	86	81	85	89	86	86	92	88·1
23 ..	92	92	92	92	91	85	84	79	78	84	86	91	86·9
24 ..	89	92	86	91	90	84	79	77	77	81	78	85	84·3
25 ..	86	80	85	86	92	92	86	79	79	83	81	83	85·0
26 ..	85	84	87	85	84	79	75	75	80	75	78	78	80·8
27 ..	79	80	86	78	80	76	75	71	73	75	76	78	76·7
28 ..	78	78	78	78	76	75	71	67	69	74	74	73	74·2
29 ..	77	77	86	89	87	86	74	71	67	73	81	81	78·9
30 ..	86	88	89	91	86	78	67	72	72	79	86	85	81·9
Mean ..	84·6	84·6	85·7	85·7	84·9	83·2	80·1	79·6	79·5	81·4	82·9	84·0	83·0

The highest hourly value during the month .. 98
The lowest „ „ „ „ .. 66

October.

Date.	HOURS.												Mean.
	0	2	4	6	8	10	12	14	16	18	20	22	
1 ..	86	86	86	86	89	84	79	77	74	82	86	87	83·1
2 ..	86	89	89	92	86	82	73	65	65	76	84	86	80·6
3 ..	86	91	87	85	77	73	68	66	66	71	84	81	78·1
4 ..	84	84	84	86	86	74	69	62	64	70	86	87	78·0
5 ..	91	92	92	92	88	80	76	74	76	76	78	84	83·1
6 ..	85	85	86	83	84	79	74	77	77	77	84	83	80·8
7 ..	84	86	86	88	86	82	73	75	74	75	78	84	80·8
8 ..	81	85	87	86	86	81	75	73	74	72	78	83	79·7
9 ..	78	77	78	66	67	64	58	56	71	81	87	76	71·7
10 ..	74	72	76	77	77	68	66	65	65	77	78	84	73·3
11 ..	86	86	88	88	87	80	75	81	82	84	80	91	84·3
12 ..	89	88	89	88	88	86	81	76	79	81	85	84	84·3
13 ..	90	91	92	91	92	79	76	74	78	80	81	85	83·7
14 ..	86	88	92	90	89	82	75	78	79	82	82	84	83·7
15 ..	86	84	85	88	87	84	76	71	74	77	82	83	81·2
16 ..	80	85	89	91	88	81	69	63	65	74	78	79	78·4
17 ..	84	86	83	83	83	77	74	74	82	86	88	89	82·3
18 ..	88	92	92	92	91	84	76	76	73	94	84	84	84·3
19 ..	88	86	84	87	86	82	57	73	67	77	85	88	79·6
20 ..	88	87	85	83	82	74	56	72	75	76	81	78	78·0
21 ..	74	81	81	78	77	66	66	66	67	69	74	59	71·2
22 ..	64	76	76	76	71	65	62	67	68	78	82	75	71·8
23 ..	78	77	64	78	71	66	52	64	68	75	76	73	70·7
24 ..	78	77	81	82	81	68	58	48	55	71	75	78	70·0
25 ..	79	82	81	81	81	66	57	54	66	58	62	79	69·8
26 ..	59	59	73	61	72	57	60	38	72	75	71	71	65·0
27 ..	74	72	72	67	73	63	69	61	64	69	72	74	67·5
28 ..	56	56	53	55	52	71	32	28	29	65	50	41	49·6
29 ..	40	39	40	44	56	58	35	31	52	65	78	71	49·7
30 ..	59	54	57	58	58	54	38	29	66	71	71	73	59·2
31 ..	83	75	69	71	84	55	36	32	59	73	75	78	65·3
Mean ..	78·8	79·6	79·9	79·8	79·8	73·1	64·2	63·0	68·6	75·1	78·5	79·1	74·8

The highest hourly value during the month .. 94
The lowest „ „ „ „ .. 26

The daily means are derived from 24 hourly values.

Bi-hourly values of relative humidity, 1921. (The figures represent percentages).

November.

Date.	HOURS.												Mean.
	0	2	4	6	8	10	12	14	16	18	20	22	
1 ..	80	73	64	70	67	57	52	63	68	78	77	83	68·6
2 ..	84	83	77	76	78	65	62	54	62	70	80	82	73·2
3 ..	81	71	69	67	69	62	62	64	64	75	77	75	69·6
4 ..	78	82	81	78	73	65	58	63	71	78	78	78	73·4
5 ..	81	84	82	86	81	65	71	67	69	78	82	84	77·5
6 ..	80	83	86	88	86	79	69	60	64	67	69	78	75·1
7 ..	71	80	81	81	65	70	63	62	57	74	70	72	70·6
8 ..	68	80	81	83	75	65	59	60	66	72	77	73	72·0
9 ..	85	84	86	83	79	62	55	58	63	67	69	73	71·2
10 ..	79	74	75	65	60	56	45	51	62	66	71	71	64·7
11 ..	76	85	86	84	79	64	46	47	57	62	67	60	68·7
12 ..	69	73	68	47	58	51	38	31	48	63	70	71	57·7
13 ..	79	81	81	74	70	59	46	50	53	62	70	72	66·7
14 ..	73	79	81	79	79	61	52	54	51	61	72	82	68·8
15 ..	82	84	84	82	79	67	49	56	62	73	77	77	71·2
16 ..	79	78	74	78	73	55	42	49	55	66	66	72	66·0
17 ..	75	77	77	76	73	60	46	51	57	68	78	81	69·0
18 ..	79	86	86	84	79	68	57	48	60	70	75	77	72·5
19 ..	78	81	81	84	82	73	66	59	63	74	83	84	75·6
20 ..	85	86	87	85	82	68	46	62	59	78	75	68	72·7
21 ..	70	76	77	74	68	56	34	55	65	72	73	73	65·3
22 ..	82	77	77	66	59	52	45	53	51	66	70	70	63·8
23 ..	69	66	78	81	76	68	60	53	54	66	73	75	69·3
24 ..	82	82	76	80	80	64	47	48	51	61	73	77	68·7
25 ..	76	76	75	75	75	67	45	52	55	62	73	72	66·9
26 ..	76	78	76	76	71	60	39	45	56	68	77	77	67·0
27 ..	78	85	84	81	77	63	45	55	56	70	76	68	70·3
28 ..	77	79	78	80	68	52	46	54	55	74	81	73	68·5
29 ..	79	79	73	76	81	70	53	42	55	67	80	74	69·2
30 ..	79	80	73	79	76	66	47	51	59	72	72	79	69·5
Mean ..	77·7	79·4	78·5	77·3	73·9	63·0	51·5	53·4	58·9	69·3	74·4	75·0	69·4

The highest hourly value during the month .. 89
The lowest „ „ „ „ .. 29

December.

Date.	HOURS.												Mean
	0	2	4	6	8	10	12	14	16	18	20	22	
1 ..	69	76	69	77	72	68	52	55	60	74	74	68	68·3
2 ..	75	74	75	74	76	57	43	41	52	66	71	63	64·0
3 ..	61	80	78	78	76	61	47	46	57	68	78	79	67·6
4 ..	79	78	80	78	74	53	47	50	58	68	79	79	68·8
5 ..	75	79	75	80	68	56	50	55	56	65	78	77	67·7
6 ..	79	73	74	75	65	62	42	55	58	69	72	81	66·0
7 ..	66	76	74	74	70	60	49	48	56	66	72	70	64·6
8 ..	72	73	70	72	69	64	62	55	62	64	71	63	66·3
9 ..	77	74	76	70	70	64	50	54	63	70	68	69	67·1
10 ..	79	77	74	66	64	56	43	55	69	71	74	72	66·8
11 ..	81	80	77	68	64	58	43	58	62	73	74	78	67·4
12 ..	82	72	68	69	71	63	46	52	61	66	68	71	65·4
13 ..	69	69	64	72	66	62	52	41	56	65	78	69	63·7
14 ..	81	73	83	78	73	63	51	49	55	69	78	77	68·5
15 ..	76	83	82	81	78	68	65	61	63	71	70	76	72·3
16 ..	78	74	78	73	74	61	49	56	59	69	70	63	67·8
17 ..	74	77	68	79	75	67	49	60	56	70	79	63	68·7
18 ..	68	75	76	79	78	63	55	47	62	76	81	75	69·7
19 ..	81	84	77	81	76	64	51	57	65	75	83	81	72·7
20 ..	79	79	77	79	78	73	54	53	60	69	77	83	71·8
21 ..	74	84	79	80	82	74	67	65	64	71	77	76	74·8
22 ..	75	67	76	80	77	69	70	64	67	71	72	77	72·6
23 ..	78	72	77	82	80	73	66	59	63	66	66	68	71·0
24 ..	73	72	69	66	60	59	51	57	63	68	70	74	65·1
25 ..	73	70	77	77	73	61	41	61	64	72	76	72	68·3
26 ..	73	77	79	78	78	57	57	58	58	71	67	68	67·9
27 ..	72	80	73	74	65	51	46	52	59	71	76	74	66·3
28 ..	74	80	75	72	71	63	56	56	57	69	77	72	68·5
29 ..	81	83	80	76	81	73	56	62	65	77	78	73	73·8
30 ..	74	74	62	61	64	49	49	52	62	65	65	67	62·0
31 ..	65	77	74	70	67	70	62	58	61	71	77	81	69·0
Mean ..	74·6	76·2	74·7	74·8	72·1	62·7	52·3	54·6	60·4	69·5	74·1	72·9	68·2

The highest hourly value during the month .. 85
The lowest „ „ „ „ .. 39

The daily means are derived from 24 hourly values.

Extent of cloudy sky, 1921.

(The whole sky cloudy is reckoned as 10.)

Date.	Hours.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December
	6	0	0	10	0	0	6	7	10	6	8	2	0
	10	0	0	0	0	0	4	3	10	8	1	1	0
1 ..	14	0	0	0	0	0	1	2	10	8	2	2	0
	16	0	0	0	0	0	4	5	10	6	2	2	0
	22	0	0	0	0	1	5	2	10	3	0	3	0
	6	0	0	0	5	6	7	6	10	10	0	9	7
	10	0	0	0	0	1	6	9	10	10	0	9	3
2 ..	14	0	0	0	0	0	6	6	10	10	0	9	0
	16	0	2	0	0	1	3	6	10	10	0	9	0
	22	0	0	0	0	0	6	2	10	3	0	3	0
	6	0	8	0	5	6	8	5	10	5	0	8	0
	10	0	0	0	7	4	6	2	10	10	0	3	0
3 ..	14	0	0	0	0	2	3	9	10	10	0	7	0
	16	0	0	0	0	2	6	6	10	10	0	8	0
	22	0	0	0	3	2	5	0	10	4	2	2	0
	6	0	5	0	6	5	7	10	8	4	1	8	0
	10	0	1	0	0	6	5	5	7	8	2	1	0
4 ..	14	0	0	0	0	4	2	5	7	9	0	3	0
	16	0	0	0	3	5	4	4	7	10	1	2	0
	22	0	0	0	2	0	2	3	6	2	0	2	0
	6	0	0	0	2	5	5	10	10	6	2	5	0
	10	0	0	0	2	4	5	9	10	7	2	2	0
5 ..	14	0	0	0	0	0	2	9	9	9	2	1	0
	16	0	0	0	0	0	5	10	7	2	7	1	0
	22	0	0	0	0	1	2	3	6	2	3	1	0
	6	0	0	0	0	5	4	8	10	7	5	5	0
	10	0	0	0	0	2	3	2	10	8	2	2	0
6 ..	14	0	0	0	0	0	3	8	10	10	0	0	0
	16	0	0	0	0	1	5	9	10	10	1	1	0
	22	0	0	0	3	0	2	3	10	8	2	0	0
	6	0	0	0	2	4	7	10	8	10	2	1	2
	10	0	0	0	1	3	2	10	10	7	2	1	3
7 ..	14	0	0	0	0	1	2	10	10	8	2	0	6
	16	0	0	0	4	0	6	10	10	10	2	0	8
	22	0	0	0	0	0	1	10	10	2	0	0	5
	6	0	0	0	7	6	7	10	10	8	3	1	9
	10	0	0	0	0	3	2	10	10	6	3	0	9
8 ..	14	0	0	0	0	0	4	10	10	6	2	2	10
	16	0	0	0	0	0	5	10	10	4	4	0	10
	22	0	0	0	0	0	2	10	10	2	2	3	10
	6	0	0	0	0	4	8	7	10	4	7	6	5
	10	0	0	0	0	0	1	9	10	4	8	0	5
9 ..	14	0	0	2	0	0	3	4	10	5	7	1	6
	16	0	0	0	0	0	8	1	10	4	10	1	7
	22	0	0	2	4	0	2	10	10	3	8	0	8
	6	0	0	6	0	3	10	10	10	5	7	1	2
	10	0	0	1	0	6	6	8	10	8	8	1	1
10 ..	14	0	0	0	0	0	7	6	10	4	6	5	1
	16	0	0	0	0	0	10	8	8	8	6	6	0
	22	0	0	0	0	0	10	4	10	8	7	3	0
	6	0	2	6	0	8	10	10	9	7	5	1	1
	10	0	0	7	0	0	10	10	8	8	8	1	1
11 ..	14	0	0	0	0	0	10	9	8	6	4	2	1
	16	0	0	0	0	0	10	10	10	8	6	2	1
	22	0	0	0	0	0	10	10	10	10	8	0	0
	6	0	2	0	6	7	10	10	10	10	9	3	1
	10	0	8	0	2	0	10	10	10	8	9	1	0
12 ..	14	0	8	0	0	0	10	10	10	7	6	0	0
	16	0	4	0	0	0	5	10	10	10	4	0	0
	22	0	0	0	0	0	10	10	10	6	4	0	0
	6	0	0	0	0	4	10	10	10	7	4	0	0
	10	0	0	0	0	4	10	7	10	9	3	0	0
13 ..	14	0	0	0	0	0	8	8	10	8	1	0	0
	16	0	0	0	0	0	10	8	10	5	1	0	0
	22	0	0	0	0	0	5	7	10	8	1	2	0
	6	3	2	0	7	5	4	10	10	7	3	2	0
	10	2	3	0	3	3	6	10	9	6	3	1	0
14 ..	14	0	0	0	1	4	5	8	8	6	0	5	0
	16	0	0	0	0	4	2	6	10	7	2	1	0
	22	0	0	0	0	0	10	9	10	6	0	0	0

Extent of cloudy sky, 1921—(contd.)

Date.	Hours.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October	November.	December.
	6	0	0	2	6	3	10	10	10	7	4	3	0
	10	0	0	0	0	3	9	6	10	10	8	2	0
15 ..	14	0	0	0	0	5	10	10	10	4	1	0	0
	16	3	0	0	0	8	10	10	8	10	1	0	0
	22	2	0	3	6	8	7	10	10	6	1	0	0
	6	8	0	0	5	5	10	10	10	10	4	2	0
	10	2	0	0	2	2	10	6	10	8	6	0	0
16 ..	14	2	0	0	0	4	7	9	10	10	4	0	0
	16	1	0	0	0	3	8	9	10	10	2	0	0
	22	0	0	0	3	6	10	10	10	10	0	0	0
	6	5	0	0	6	3	10	9	10	10	8	0	0
	10	3	2	1	4	2	6	10	9	10	4	0	0
17 ..	14	8	0	0	0	1	10	9	10	10	0	0	0
	16	7	4	0	0	5	10	8	10	10	9	0	0
	22	7	0	0	5	1	10	10	10	7	7	0	0
	6	8	2	0	7	3	10	10	10	10	4	1	0
	10	3	0	0	3	2	10	10	10	10	5	0	0
18 ..	14	2	0	0	2	1	10	10	10	10	2	0	0
	16	1	0	0	4	1	10	10	10	10	5	0	0
	22	10	0	0	4	3	10	10	10	10	7	8	0
	6	2	2	1	3	3	10	10	10	10	10	2	0
	10	0	2	0	7	1	10	10	10	10	0	7	0
19 ..	14	0	2	0	2	1	10	10	8	10	1	7	1
	16	0	6	0	1	3	10	10	8	7	1	4	0
	22	0	0	0	4	2	10	10	10	9	8	0	0
	6	1	1	6	3	4	10	10	10	4	4	2	0
	10	2	2	1	1	1	10	10	9	3	1	1	0
20 ..	14	4	1	0	0	1	10	10	3	9	0	1	0
	16	1	0	0	0	2	10	10	5	9	3	1	0
	22	0	0	6	4	3	10	10	10	8	8	0	0
	6	0	0	3	3	4	10	10	9	6	8	4	0
	10	0	2	0	1	0	10	10	7	5	1	2	0
21 ..	14	0	2	0	7	1	10	10	4	9	0	1	0
	16	0	2	0	5	2	10	10	5	10	1	0	0
	22	0	0	0	10	2	10	10	10	7	9	0	0
	6	0	0	0	0	1	8	10	8	7	2	0	0
	10	0	0	0	1	2	9	10	6	9	1	0	0
22 ..	14	0	0	0	0	2	8	10	8	7	4	0	0
	16	0	0	0	0	4	7	10	6	10	1	5	0
	22	0	0	0	0	4	10	10	10	4	0	0	0
	6	0	0	2	7	2	10	10	8	6	9	0	0
	10	0	0	2	0	4	7	10	4	2	6	0	0
23 ..	14	0	0	0	0	3	6	10	3	1	0	0	0
	16	0	0	0	0	3	5	10	5	2	0	0	0
	22	0	0	0	5	2	7	10	7	3	0	0	0
	6	0	0	4	6	3	4	10	4	5	1	0	0
	10	3	0	0	2	1	5	10	2	1	2	0	0
24 ..	14	0	0	0	1	0	3	10	5	8	0	0	0
	16	0	0	0	2	1	7	10	7	5	0	0	0
	22	0	0	0	5	2	5	10	3	2	0	0	0
	6	0	0	0	1	1	7	10	8	10	2	0	0
	10	0	0	0	4	2	8	8	8	8	1	0	0
25 ..	14	0	0	0	0	4	9	10	2	7	0	0	0
	16	0	0	0	0	3	10	8	1	8	2	0	0
	22	0	0	0	0	3	5	8	5	5	0	0	0
	6	0	0	0	0	0	6	10	8	7	2	0	0
	10	0	0	0	0	5	5	10	8	3	0	0	0
26 ..	14	0	0	0	0	4	8	10	7	7	1	0	0
	16	0	0	0	3	3	4	10	9	8	1	0	0
	22	0	0	0	0	4	3	10	10	1	0	0	0
	6	0	0	0	1	3	3	10	10	4	8	0	0
	10	0	0	0	2	3	5	10	5	4	0	0	0
27 ..	14	0	0	0	0	1	6	10	5	4	1	0	0
	16	0	0	0	6	2	6	10	5	6	1	0	0
	22	0	0	0	0	2	2	10	3	0	0	0	0
	6	0	0	4	4	2	7	10	9	3	1	0	0
	10	0	0	3	1	3	3	10	9	6	0	0	0
28 ..	14	1	0	1	2	2	8	10	4	3	0	0	0
	16	1	0	0	4	4	10	8	2	4	0	0	0
	22	0	0	0	0	0	0	10	0	0	0	0	0

Extent of cloudy sky, 1921– (contd.)

Date.	Hours.	January.	Febru. ary.	March.	April.	May.	June.	July.	August.	Sep- tember.	Octo- ber.	Nov- ember.	December.
	6	2		0	2	4	8	10	5	8	1	0	0
	10	0		0	0	2	9	10	9	6	6	0	0
29	14	2		0	0	1	8	10	6	2	4	0	0
	16	4		0	1	3	10	10	5	3	5	0	0
	22	0		0	0	2	2	10	10	0	0	0	0
	6	2		0	0	6	3	10	6	2	1	0	0
	10	0		0	0	1	4	10	10	2	1	0	0
30	14	0		0	0	3	7	10	8	1	0	0	0
	16	0		0	0	2	5	10	8	2	0	0	0
	22	0		0	0	2	2	10	1	9	0	0	0
	6	0		0		5		10	9		3		1
	10	0		0		1		10	8		2		3
31	14	0		0		3		8	6		2		3
	16	0		0		2		10	4		5		2
	22	0		0		2		10	5		0		1
Mean		0·7	0·5	0·5	1·6	2·3	6·8	8·7	8·3	6·6	2·8	1·4	0·9

Temperature of ground, 1921.

Month.	In shade at the depths of										Exposed to the sun at the depth of 1 Inch.					Mean of 5 obser- vations.
	1 Inch.		9 Inches.		20 Inches.		60 Inches.		132 Inches.		Observation hours.					
	Mean temperature.	Excess over the yearly mean.	Mean temperature.	Excess over the yearly mean.	Mean temperature.	Excess over the yearly mean.	Mean temperature.	Excess over the yearly mean.	Mean temperature.	Excess over the yearly mean.	6	10	14	16	22	
	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	
January ..	76·9	−5·3	78·3	−4·9	82·0	−3·9	84·5	−1·5	84·4	−0·3	74·6	77·1	94·0	93·2	80·2	83·8
February ..	77·9	−4·3	78·3	−4·9	81·6	−4·3	83·9	−2·1	83·9	−0·8	76·9	81·2	100·3	100·9	82·6	88·4
March ..	82·3	+0·1	82·1	−1·1	84·0	−1·9	84·3	−1·7	83·9	−0·8	83·0	89·1	109·3	110·4	91·8	96·7
April ..	86·0	+3·8	85·8	+2·6	87·3	+1·4	85·8	−0·2	84·3	−0·4	88·5	94·7	114·5	115·0	96·3	101·8
May ..	88·1	+5·9	88·0	+4·8	90·1	+4·2	88·0	+2·0	85·1	+0·4	93·0	99·3	117·8	117·8	99·8	105·5
June ..	85·8	+3·6	87·2	+4·0	89·7	+3·8	88·5	+2·5	85·2	+0·5	86·1	89·7	100·7	99·9	88·1	92·9
July ..	82·6	+0·4	85·0	+1·8	87·8	+1·9	88·0	+2·0	85·5	+0·8	80·4	82·4	86·4	87·5	83·6	84·1
August ..	82·0	−0·2	83·9	+0·7	86·8	+0·9	87·0	+1·0	85·8	+1·1	79·2	81·8	87·7	88·1	83·4	84·0
September ..	81·6	−0·6	83·4	+0·2	86·1	+0·2	86·2	+0·2	85·2	+0·5	78·5	83·0	90·8	88·5	82·6	84·7
October ..	83·7	+1·5	84·5	+1·3	86·5	+0·6	85·8	−0·2	84·6	−0·1	83·7	90·5	105·9	105·2	91·0	95·3
November ..	81·0	−1·2	82·2	−1·0	85·2	−0·7	85·6	−0·4	84·3	−0·4	79·8	86·8	103·2	101·6	88·0	91·9
December ..	78·8	−3·4	80·3	−2·9	83·8	−2·1	85·0	−1·0	84·0	−0·7	75·6	81·9	101·6	96·8	86·4	88·5
Year ..	82·2		83·2		85·9		86·0		84·7		81·6	86·5	101·0	100·4	87·8	91·5

Diurnal variation of magnetic elements.

The following tables give the diurnal variation of D, H, Z, X, Y, I and F for each month based on the hourly tabulations for the 5 international quiet days. The days are reckoned from 4h. 51m. to 4h. 51m. of local mean time corresponding to the Greenwich civil day 0 h to 24 h.

The variations in X, Y, I and F were computed from the variations in D, H and Z by means of the formulae :—

$$\Delta X = 1{\cdot}000\,\Delta H - 0{\cdot}050\,\Delta D$$
$$\Delta Y = 0{\cdot}005\,\Delta H + 10{\cdot}752\,\Delta D$$
$$\Delta I = 0{\cdot}076\,\Delta Z - 0{\cdot}036\,\Delta H$$
$$\Delta F = 0{\cdot}906\,\Delta H + 0{\cdot}423\,\Delta Z$$

A plus sign indicates an hourly value greater than the mean for the day.

Mean results are also given for groups of four months, as indicated by the roman numerals at the head of the columns. : I—January, February, November, December ; II—March, April, September, October ; III—May, June, July, August.

All diurnal inequalities have been given uncorrected for the aperiodic change ; the values of the elements for the initial and the terminal hours have, however, been given to enable the corrections to be determined and applied, if required.

Diurnal variation of D.

[International quiet days, Greenwich mean time.]

1921.

Hour.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Group means.			Year.
	I	I	II	II	III	III	III	III	II	II	I	I	I	II	III	
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
0	−0·3	−0·1	−0·2	+0·2	+0·4	+0·6	+0·7	+0·7	+0·5	+0·2	−0·1	−0·3	−0·2	+0·2	+0·6	+0·2
1	−0·3	−0·2	−0·1	+0·4	+1·3	+1·5	+1·5	+1·5	+0·9	+0·3	−0·1	−0·4	−0·2	+0·4	+1·5	+0·5
2	+0·1	−0·2	+0·1	+1·2	+2·3	+2·1	+2·3	+2·7	+1·8	+0·9	−0·3	−0·6	−0·2	+1·0	+2·3	+1·0
3	+0·8	+0·3	+0·9	+1·7	+2·9	+2·1	+2·2	+3·1	+1·9	+1·1	+0·4	−0·3	+0·3	+1·4	+2·6	+1·4
4	+1·1	+0·9	+1·6	+1·5	+2·1	+1·6	+1·3	+2·1	+1·0	+0·3	+0·4	+0·3	+0·7	+1·1	+1·8	+1·2
5	0·0	+0·6	+1·5	+1·0	+0·2	+0·7	+0·4	+0·2	−0·5	−0·6	−0·4	+0·1	+0·1	+0·4	+0·4	+0·3
6	−0·8	−0·2	−0·8	−0·3	−1·5	−0·5	−0·7	−1·5	−1·2	−1·5	−1·1	−0·2	−0·6	−0·5	−1·0	−0·7
7	−1·2	−0·9	−0·4	−1·4	−2·4	−1·7	−1·8	−2·4	−2·1	−2·1	−1·2	−0·3	−0·9	−1·5	−2·1	−1·5
8	−0·8	−0·9	−1·1	−1·8	−2·5	−2·1	−1·6	−2·4	−2·2	−1·6	−0·6	−0·1	−0·6	−1·7	−2·2	−1·5
9	−0·3	−0·5	−1·2	−1·7	−1·7	−1·6	−1·6	−1·9	−1·5	−0·6	+0·1	+0·2	0·1	−1·3	−1·7	−1·0
10	+0·3	−0·1	−0·6	−1·2	−0·9	−0·7	−1·4	−1·1	−0·5	+0·3	+0·4	+0·3	+0·2	−0·5	−1·1	−0·4
11	+0·7	+0·2	+0·1	−0·3	−0·2	−0·1	−0·8	−0·2	+0·3	+0·8	+0·5	+0·3	+0·4	+0·2	−0·3	+0·1
12	+0·3	+0·3	+0·3	+0·1	+0·2	0·0	−0·3	+0·4	+0·3	+0·6	+0·3	+0·4	+0 3	+0·3	+0·1	+0·3
13	0·0	+0·1	+0·1	−0·2	+0·2	−0·2	0·0	+0·3	0·0	0·0	+0·3	+0·5	+0·2	0·0	+0·1	+0·1
14	+0·2	+0·2	−0·1	−0·4	−0·2	−0·6	−0·3	−0·2	−0·1	+0·1	+0·2	+0·3	+0·2	−0·1	−0·3	−0·1
15	+0·2	+0·2	−0·2	−0·4	−0·4	−0·7	−0·5	−0·3	−0·2	0·0	+0·1	+0·3	+0·2	−0·2	−0·5	−0·2
16	+0·2	+0·1	−0·3	−0·3	−0·3	−0·6	−0·5	−0·4	0·0	+0·1	+0·1	+0·2	+0·2	−0·1	−0·5	−0·1
17	+0·2	+0·1	−0·2	−0·1	−0·1	−0·5	−0·3	−0·3	+0·1	0·0	+0·2	+0·1	+0·1	−0·1	−0·3	−0·1
18	+0·1	0·0	−0·2	0·0	−0·1	−0·2	−0·1	−0·2	+0·1	+0·2	+0·2	+0·1	+0·1	0·0	−0·1	0·0
19	0·0	+0·1	−0·1	+0·2	0·0	−0·1	+0·1	−0·1	+0·1	+0·3	+0·3	0·0	+0·1	+0·1	0·0	+0·1
20	0·0	+0·1	−0·1	+0·4	+0·1	+0·1	+0·3	0·0	+0·3	+0·4	+0·2	0·0	+0·1	+0·3	+0·1	+0·1
21	−0·1	+0·1	−0·1	+0·4	+0·2	+0·2	+0·3	+0·1	+0·5	+0·4	+0·1	−0·1	0·0	+0·3	+0·2	+0·2
22	−0·2	0·0	−0·1	+0·4	+0·2	+0·2	+0·4	+0·1	+0·4	+0·3	+0·1	−0·3	−0·1	+0·2	+0·2	+0·1
23	−0·3	−0·1	−0·2	+0·3	+0·2	+0·3	+0·4	+0·1	+0·4	+0·2	−0·1	−0·4	−0·2	+0·2	+0·3	+0·1
24	−0·4	−0·2	−0·3	+0·3	+0·4	+0·5	+0·5	+0·4	+0·4	0·0	−0·4	−0·6	−0·4	+0·1	+0·5	+0·1

Diurnal variation of H.

[International quiet days, Greenwich mean time.]

1921.

Hour.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Group means.			Year.
	I	I	II	II	III	III	III	III	II	II	I	I	I	II	III	
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
0	− 2	−10	−13	−13	−12	−13	−16	− 9	−13	− 9	−10	− 7	− 7	−12	−13	−11
1	− 2	− 8	−13	−13	−10	−10	−13	− 9	11	− 9	− 9	− 4	− 5	−12	−11	− 9
2	− 2	− 6	−11	− 11	− 9	− 6	− 8	7	9	−10	− 1	+ 1	− 2	−10	− 7	− 7
3	− 5	− 2	− 1	5	− 3	+ 2	− 3	− 3	− 2	− 3	+ 7	+ 6	+ 2	− 3	0	− 1
4	− 6	+ 5	+12	+11	+ 6	+ 9	+11	+ 6	+11	+ 7	+18	+10	+ 7	+10	+ 8	+ 8
5	+ 6	+12	+24	+23	+21	+16	+22	+19	+24	+15	+ 26	+14	+14	+21	+19	+18
6	+11	+21	+32	+32	+29	+20	+30	+26	+28	+21	+32	+19	+21	+28	+26	+25
7	+15	+26	+35	+33	+28	+22	+30	+26	+27	+25	+28	+17	+21	+30	+27	+26
8	+14	+22	+27	+27	+23	+19	+26	+20	+24	+19	+18	+13	+17	+24	+22	+21
9	+ 8	+14	+17	+15	+15	+13	+17	+14	+16	+10	+ 8	+ 7	+ 9	+15	+ 15	+13
10	+ 4	+ 5	+ 7	+ 4	+ 8	+ 2	+ 8	+ 6	+ 7	+ 4	0	+ 1	+ 3	+ 6	+ 6	+ 5
11	− 1	− 2	− 1	− 1	+ 2	− 3	− 2	− 4	+ 1	− 1	− 5	− 3	− 2	− 1	− 2	− 1
12	− 4	− 5	− 5	− 4	− 4	− 7	−10	− 8	− 3	− 3	8	− 6	− 6	− 4	− 7	− 6
13	− 8	− 7	− 7	− 4	−10	− 8	−14	− 8	− 6	− 5	9	− 8	− 8	− 5	10	− 8
14	− 7	− 9	− 9	− 7	−13	− 7	−12	− 7	− 8	− 7	−10	− 8	− 9	− 8	− 9	− 9
15	− 7	− 9	− 9	− 8	−11	− 7	−11	− 8	10	− 7	11	− 8	− 9	− 9	− 9	− 9
16	− 6	− 9	−11	− 9	−10	− 8	− 8	− 8	− 12	− 8	−11	− 9	− 9	−10	− 9	− 9
17	− 5	− 9	−13	− 9	− 9	− 8	− 8	− 8	−12	− 7	− 11	− 8	− 8	−10	− 8	− 9
18	− 5	− 9	− 12	− 8	− 9	− 7	− 8	− 8	11	− 7	−10	− 8	− 8	−10	− 8	− 9
19	− 2	− 7	−10	−10	− 6	− 7	− 9	− 7	−10	− 7	−11	− 7	− 7	− 9	− 7	− 8
20	− 1	− 5	−10	−10	− 7	− 6	− 9	− 8	− 9	− 5	−10	− 6	− 6	− 9	− 7	− 7
21	− 1	− 6	−11	−11	− 7	− 5	− 8	− 7	−10	− 5	− 9	− 4	− 5	− 9	− 7	− 7
22	+ 1	− 5	−10	−10	− 8	− 4	− 8	− 6	− 9	− 6	− 9	− 2	− 4	− 9	− 6	− 6
23	+ 2	− 2	− 8	−10	− 6	− 2	− 7	− 5	− 7	− 7	− 8	− 2	− 2	− 8	− 5	− 5
24	+ 4	0	− 7	−10	− 6	− 3	− 7	− 5	− 6	− 3	− 7	− 1	− 1	− 7	− 5	− 4

Diurnal variation of Z.

[International quiet days, Greenwich mean time.]

1921.

Hour.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Group means.			Year.
	I	I	II	II	III	III	III	III	II	II	I	I	I	II	III	
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
0	− 2	+ 1	+ 5	+ 5	+ 2	+ 9	+ 4	+ 4	+ 6	+ 3	+ 1	+ 2	0	+ 5	+ 5	+ 3
1	0	+ 2	+ 6	+ 8	+ 9	+15	+ 8	+11	+ 8	+ 6	+ 1	+ 2	+ 1	+ 7	+11	+ 6
2	+ 4	+ 3	+10	+11	+ 9	+12	+ 7	+13	+10	+ 7	+ 3	+ 3	+ 3	+10	+10	+ 8
3	+ 3	+ 7	+11	+ 7	+ 1	+ 5	+ 1	+ 4	− 2	− 1	+ 5	+ 6	+ 5	+ 4	+ 3	+ 4
4	− 6	+ 4	+ 8	0	−18	3	− 8	−10	−13	−11	0	+ 5	+ 1	− 4	−10	− 4
5	−16	− 6	− 3	−10	−29	−13	−19	−20	−18	− 7	0	− 7	13	−19	−13	
6	−17	−12	−11	−17	−27	−17	−18	−21	−21	−21	−10	− 4	−11	−17	−21	−16
7	−10	−12	−15	−16	−20	17	15	16	− 19	−16	− 3	− 3	− 7	−17	−17	−14
8	+ 1	− 7	− 9	−11	− 11	− 9	− 5	− 7	− 7	− 5	+ 3	− 2	− 1	− 8	− 8	− 6
9	+ 8	+ 1	− 2	− 4	− 4	− 1	4	− 2	+ 4	+ 4	+ 3	− 1	+ 3	0	− 3	0
10	+10	+ 2	+ 4	+ 1	+ 2	+ 5	0	+ 3	+10	+ 8	− 1	− 2	+ 2	+ 6	+ 3	+ 3
11	+ 6	+ 3	+ 4	+ 3	+ 7	+ 4	− 2	+ 7	+ 8	+ 6	− 2	0	+ 2	+ 5	+ 5	+ 4
12	+ 1	+ 3	+ 1	1	+ 8	+ 2	+ 3	+ 5	+ 3	1	− 3	+ 1	0	+ 1	+ 5	+ 2
13	+ 2	+ 1	− 1	− 3	+ 5	− 1	+ 3	0	− 1	− 1	− 4	0	0	− 1	+ 1	0
14	+ 2	+ 2	− 1	− 2	+ 2	− 3	0	− 1	0	+ 1	3	0	0	− 1	0	0
15	+ 3	+ 1	− 2	0	+ 3	1	+ 1	− 1	+ 1	+ 2	− 1	0	+ 1	0	+ 1	+ 1
16	+ 3	0	− 1	+ 2	+ 5	+ 1	+ 3	+ 1	+ 3	+ 3	0	− 1	+ 1	+ 2	+ 2	+ 1
17	+ 2	+ 1	1	+ 3	+ 7	+ 2	+ 4	+ 3	+ 3	+ 5	+ 1	− 1	− 1	− 2	+ 4	+ 2
18	+ 1	+ 2	0	+ 3	+ 7	+ 2	+ 5	+ 4	+ 4	+ 6	+ 3	0	− 1	+ 3	+ 5	+ 3
19	+ 1	− 2	+ 1	+ 5	+ 8	+ 2	+ 5	+ 5	+ 4	+ 6	+ 2	0	+ 1	+ 4	+ 5	+ 3
20	+ 1	+ 1	0	+ 5	+ 7	+ 2	+ 4	+ 5	+ 5	+ 5	+ 2	0	+ 1	+ 4	+ 5	+ 3
21	+ 1	+ 1	0	+ 4	+ 7	+ 2	+ 4	+ 4	+ 5	+ 5	+ 3	− 1	+ 1	+ 4	+ 4	+ 3
22	+ 1	0	0	+ 4	+ 7	+ 1	+ 4	+ 4	+ 5	+ 5	+ 3	0	+ 1	+ 3	+ 4	+ 3
23	+ 1	0	− 1	+ 3	+ 8	+ 1	+ 4	+ 5	+ 5	+ 4	− 1	− 1	0	+ 3	+ 5	+ 3
24	+ 2	0	− 1	+ 4	+ 9	+ 3	+ 5	+ 7	+ 7	+ 4	+ 2	− 1	+ 1	+ 3	+ 6	+ 3

Diurnal variation of X.

[International quiet days, Greenwich mean time.]

1921.

Hour.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Group means.		Year.
	I	I	II	II	III	III	III	III	II	II	I	I	I	II	III	
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
0	− 2	−10	−13	−13	−12	−13	−16	− 9	−13	− 9	−10	− 7	− 7	−12	−13	−11
1	− 2	− 8	−13	−13	−10	−10	−13	− 9	−11	− 9	− 9	− 4	− 5	−12	−11	− 9
2	− 2	− 6	−11	−11	− 9	− 6	− 8	− 7	− 9	−10	− 1	+ 1	− 2	−10	− 7	− 7
3	− 5	− 2	− 1	− 5	− 3	+ 2	+ 3	− 4	− 2	− 3	+ 7	+ 6	+ 2	− 3	− 1	− 1
4	− 6	+ 5	+11	+11	+ 6	+ 9	+11	+ 6	+11	+ 7	+18	+10	+ 7	+10	+ 8	+ 8
5	+ 6	+12	+24	+23	+21	+16	+22	+19	+24	+15	+26	+14	+14	+21	+19	+18
6	+11	+21	+32	+32	+29	+20	+30	+26	+28	+21	+32	+19	+21	+28	+26	+25
7	+15	+26	+35	+33	+28	+22	+30	+26	+27	+25	+28	+17	+21	+30	+27	+26
8	+14	+23	+27	+27	+23	+19	+26	+21	+24	+20	+18	+13	+17	+24	+22	+21
9	+ 8	+14	+17	+15	+15	+13	+17	+15	+16	+10	+ 8	+ 7	+ 9	+15	+15	+13
10	− 4	+ 5	+ 7	+ 4	+ 8	+ 2	+ 8	+ 6	+ 7	+ 4	0	+ 1	+ 3	+ 6	+ 6	+ 5
11	− 1	− 2	− 1	− 1	+ 2	− 3	− 2	− 4	+ 1	− 1	− 5	− 3	− 2	0	− 2	− 1
12	− 4	− 5	− 5	− 4	− 4	− 7	−10	− 8	− 3	− 3	− 8	− 6	− 6	− 4	− 7	− 6
13	− 8	− 7	− 7	− 4	−10	− 8	−14	− 8	− 6	− 5	− 9	− 8	− 8	− 5	−10	− 8
14	− 7	− 9	− 9	− 7	−13	− 7	−12	− 7	− 8	− 7	−10	− 8	− 9	− 8	− 9	− 9
15	− 7	− 9	− 9	− 8	−11	− 7	−11	− 8	−10	− 7	−11	− 8	− 9	− 9	− 9	− 9
16	− 6	− 9	−11	− 9	−10	− 8	− 8	− 8	−12	− 8	−11	− 9	− 9	−10	− 9	− 9
17	− 5	− 9	−13	− 9	− 9	− 8	− 8	− 8	−12	− 7	−11	− 8	− 8	−10	− 8	− 9
18	− 5	− 9	−12	− 8	− 9	− 7	− 8	− 8	−11	− 7	−10	− 8	− 8	−10	− 8	− 9
19	− 2	− 7	−10	−10	− 6	− 7	− 9	− 7	−10	− 7	−11	− 7	− 7	− 9	− 7	− 8
20	− 1	− 5	−10	−10	− 7	− 6	− 9	− 8	− 9	− 5	−10	− 6	− 6	− 9	− 7	− 7
21	− 1	− 6	−11	−11	− 7	− 5	− 8	− 7	−10	− 5	− 9	− 4	− 5	− 9	− 7	− 7
22	+ 1	− 5	−10	−10	− 8	− 4	− 8	− 6	− 9	− 6	− 9	− 2	− 4	− 9	− 6	− 6
23	+ 2	− 2	− 8	−10	− 6	− 2	− 7	− 5	− 7	− 7	− 8	− 2	− 2	− 8	− 5	− 5
24	+ 4	0	− 7	−10	− 6	− 3	− 7	− 5	− 6	− 3	− 7	− 1	− 1	− 7	− 5	− 4

Diurnal variation of Y.

[International quiet days, Greenwich mean time.]

1921.

Hour.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Group means.		Year.
	I	I	II	II	III	III	III	III	II	II	I	I	I	II	III	
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
0	− 3	− 1	− 3	+ 3	+ 4	+ 6	+ 8	+ 8	+ 5	+ 3	− 1	− 4	− 2	+ 2	+ 7	+ 2
1	− 3	− 2	− 1	+ 4	+14	+17	+16	+16	+ 9	+ 3	− 1	− 4	− 3	+ 4	+16	+ 6
2	+ 1	− 2	+ 1	+13	+25	+23	+25	+29	+19	+ 9	− 3	− 6	− 3	+11	+25	+11
3	+ 9	+ 3	+10	+18	+31	+23	+24	+33	+20	+11	+ 4	− 3	+ 3	+15	+28	+15
4	+11	+ 9	+17	+17	+23	+18	+14	+22	+11	+ 3	+ 5	+ 3	+ 7	+12	+19	+13
5	0	+ 7	+16	+11	+ 2	+ 7	+ 4	+ 2	− 5	− 6	− 4	+ 1	+ 1	+ 4	+ 4	+ 3
6	− 9	− 2	+ 9	− 3	−16	− 5	− 7	−16	−13	−16	−12	− 3	− 7	− 6	−11	− 8
7	−13	− 5	−10	−15	−26	−18	−19	−26	−23	−22	−13	− 3	−10	−16	−22	16
8	− 9	−10	−11	−19	−27	−23	−17	−26	−24	−17	− 6	− 1	− 7	−18	−23	16
9	− 3	− 5	−13	−18	−18	−17	−17	−20	−16	− 7	+ 1	+ 3	− 1	−13	−18	−11
10	+ 3	− 1	− 7	−13	−10	− 8	−15	−12	− 5	+ 4	+ 5	+ 3	+ 3	− 5	−11	− 4
11	+ 8	+ 2	+ 1	− 4	− 2	− 1	− 8	− 2	+ 3	+ 8	+ 5	+ 3	+ 5	+ 2	− 3	+ 1
12	+ 3	+ 3	+ 3	+ 1	+ 2	0	− 3	+ 5	+ 3	+ 6	+ 3	+ 5	+ 3	+ 3	− 1	+ 2
13	0	+ 1	+ 2	− 3	+ 3	− 2	0	+ 4	0	0	+ 3	+ 5	+ 2	0	+ 1	+ 1
14	+ 2	+ 3	− 1	− 4	− 2	− 6	4	− 2	− 1	+ 1	+ 3	+ 3	+ 3	− 1	− 3	0
15	+ 3	+ 3	− 2	− 4	− 5	− 7	5	− 4	− 3	0	+ 1	+ 3	+ 3	− 2	− 5	− 1
16	+ 3	+ 1	− 3	− 3	− 3	− 7	− 5	− 4	0	+ 1	+ 1	+ 2	+ 2	− 1	− 5	− 1
17	+ 2	+ 1	− 3	− 1	− 1	− 5	− 3	− 3	+ 1	0	+ 2	+ 1	− 2	− 1	− 3	− 1
18	+ 1	0	− 2	0	− 1	− 2	− 1	− 3	+ 1	+ 2	+ 2	+ 1	+ 1	0	− 2	0
19	0	+ 1	− 1	+ 2	0	− 1	+ 1	− 1	+ 1	+ 4	+ 3	0	+ 1	+ 2	0	+ 1
20	0	+ 1	− 1	+ 4	+ 1	+ 1	+ 3	0	+ 3	+ 4	+ 2	0	+ 1	+ 3	+ 1	+ 2
21	− 1	+ 1	− 1	+ 5	+ 2	+ 2	+ 3	+ 1	+ 5	+ 4	+ 1	− 1	0	+ 2	+ 2	+ 2
22	− 2	0	− 2	+ 4	+ 2	+ 2	+ 4	+ 1	+ 4	+ 3	+ 1	− 3	− 1	+ 2	+ 2	+ 1
23	− 3	− 1	− 3	+ 4	+ 3	+ 3	+ 4	+ 1	+ 4	+ 2	− 1	− 4	− 2	+ 2	+ 3	+ 1
24	− 4	− 3	− 3	+ 4	+ 4	+ 5	+ 5	+ 5	+ 5	0	− 4	− 6	− 4	+ 2	+ 5	+ 1

Diurnal variation of I.

[International quiet days, Greenwich mean time.]

1921.

Hour.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Group means.			Year.
	I	I	II	II	III	III	III	III	II	II	I	I	I	II	III	
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
0	−0·1	+0·4	+0·9	+0·8	+0·6	+1·1	+0·9	+0·7	+0·9	+0·5	+0·5	+0·4	+0·3	+0·8	+0·8	+0·6
1	+0·1	+0·4	+0·9	+1·1	+1·1	+1·5	+1·1	+1·2	+1·0	+0·8	+0·4	+0·3	+0·3	+1·0	+1·2	+0·8
2	+0·4	+0·5	+1·2	+1·3	+1·1	+1·1	+0·8	+1·2	+1·1	+0·9	+0·2	+0·1	+0·3	+1·1	+1·1	+0·8
3	+0·4	+0·6	+0·9	+0·7	+0·2	+0·3	−0·1	+0·4	−0·1	0·0	+0·1	+0·3	+0·3	+0·4	+0·2	+0·3
4	−0·3	+0·1	+0·2	−0·4	−1·6	−0·5	−1·0	−1·0	−1·4	−1·1	−0·6	+0·1	−0·2	−0·7	−1·0	−0·6
5	−1·4	−0·9	−1·1	−1·6	−3 0	−1·5	−1·8	−2·1	−2·4	−1·9	−1·5	−0·5	−1·1	−1·7	−2·1	−1·6
6	−1·7	−1·7	−2·0	−2·4	−3·1	−2·0	−2·4	−2·5	−2·6	−2·4	−1·9	−1·0	−1·5	−2·3	−2·5	−2·1
7	−1·3	−1·8	−2·4	−2·4	−2·5	−2·1	−2·2	−2·2	−2·4	−2·1	−1·2	−0·9	−1·3	−2·3	2·3	−2·0
8	−0·4	−1·3	−1·7	−1·8	−1·7	−1·4	−1·3	−1·3	−1·4	−1·1	−0·4	−0·6	0·7	−1·5	−1·4	−1·2
9	+0·3	−0·4	−0·8	−0·8	−0·8	−0·5	−0·9	−0·7	−0·3	−0·1	−0·1	−0·3	−0·1	−0·5	−0·7	−0·5
10	+0·6	−0·1	+0·1	0·0	−0·1	+0·3	−0·3	0·0	+0·5	+0·4	−0·1	−0·2	+0·1	+0·2	0·0	+0·1
11	+0·5	+0·3	+0·4	+0·2	+0·5	+0·4	+0·3	+0·7	+0·6	+0·5	0·0	+0·1	+0·2	+0·4	+0·5	+0·4
12	+0·2	+0·4	+0·3	+0·1	+0·7	+0·4	+0·6	+0·7	+0·3	0·0	0·0	+0·3	+0·2	+0·2	+0·6	+0·3
13	+0·4	+0·3	+0·2	−0·1	+0·7	+0·2	+0·7	+0·3	+0·2	+0·1	0·0	+0·3	+0·3	+0·1	+0·5	+0·3
14	+0·4	+0·5	+0·2	+0·1	+0·6	0·0	+0·4	+0·1	+0·3	+0·3	+0·1	+0·3	+0·3	+0·2	+0·3	+0·3
15	+0·5	+0·4	+0·2	+0·3	+0·7	+0·2	+0·5	+0·2	+0·3	+0·4	+0·3	+0·3	+0·4	+0·3	+0·4	+0·3
16	+0·5	+0·3	+0·3	+0·5	+0·8	+0·3	+0·5	+0·4	+0·7	+0·5	+0·4	+0·2	+0·4	+0·5	+0·5	+0·5
17	+0·3	+0·4	+0·4	+0·5	+0·9	+0·4	+0·6	+0·5	+0·7	+0·6	+0·5	+0·2	+0·4	+0·5	+0·6	+0·5
18	+0·3	+0·5	+0·4	+0·6	+0·9	+0·4	+0·6	+0·6	+0·7	+0·7	+0·6	+0·3	+0·4	+0·6	+0·6	+0·5
19	+0·1	+0·4	+0·4	+0·7	+0·8	+0·4	+0·7	+0·6	+0·7	+0·7	+0·6	+0·3	+0·3	+0·6	+0·6	+0·5
20	+0·1	+0·3	+0·4	+0·7	+0·8	+0·4	+0·6	+0·6	+0·7	+0·5	+0·5	+0·2	+0·3	+0·6	+0·6	+0·5
21	+0·1	+0·3	+0·4	+0·7	+0·8	+0·3	+0·6	+0·6	+0·7	+0·6	+0·5	+0·1	+0·2	+0·6	+0·6	+0·5
22	0·0	+0·2	+0·3	+0·7	+0·8	+0·3	+0·6	+0·5	+0·7	+0·6	+0·5	0·0	+0·2	+0·6	+0·5	+0·4
23	0·0	+0·1	+0·2	+0·6	+0·8	+0·2	+0·6	+0·5	+0·6	+0·5	+0·4	0·0	+0·1	+0·5	+0·5	+0·4
24	0·0	0·0	+0·1	+0·6	+0·9	+0·4	+0·6	+0·7	+0·7	+0·4	+0·4	0·0	+0·1	+0·5	+0·6	+0·4

Diurnal variation of F.

[International quiet days, Greenwich mean time.]

1921.

Hour.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Group means.			Year.
	I	I	II	II	III	III	III	III	II	II	I	I	I	II	III	
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
0	− 3	− 8	−10	−10	−10	− 8	−12	− 7	− 9	− 7	− 9	− 5	− 6	− 9	− 9	− 8
1	− 2	− 6	− 9	− 9	− 5	− 3	− 8	− 4	− 6	− 5	− 7	− 3	− 4	− 8	− 5	− 6
2	0	− 4	− 5	− 5	− 4	0	− 4	− 1	− 4	− 6	+ 1	+ 2	− 1	− 5	− 2	− 3
3	− 3	+ 1	+ 4	− 2	− 3	+ 4	+ 4	− 1	− 3	− 3	+ 8	+ 8	+ 4	− 1	+ 1	+ 1
4	− 8	+ 6	+14	+10	− 2	+ 7	+ 6	+ 2	+ 5	+ 2	+16	+12	+ 7	+ 8	+ 3	+ 6
5	− 2	+ 8	+20	+16	+ 7	+ 9	+14	+ 9	+13	+ 5	+21	+12	+10	+14	+10	+11
6	+ 3	+14	+24	+22	+15	+11	+20	+15	+16	+10	+25	+15	+14	+18	+15	+16
7	+ 9	+18	+25	+23	+17	+13	+20	+17	+16	+16	+24	+14	+16	+20	+17	+18
8	+13	+18	+20	+20	+16	+13	+21	+16	+19	+15	+18	+11	+15	+18	+16	+17
9	+11	+13	+15	+12	+12	+11	+14	+12	+16	+11	+ 9	+ 5	+10	+13	+12	+12
10	+ 8	+ 5	+ 8	+ 4	+ 8	+ 4	+ 7	+ 7	+11	+ 7	0	0	+ 3	+ 8	+ 6	+ 6
11	+ 2	− 1	+ 1	0	+ 5	− 1	− 1	0	+ 5	+ 1	− 5	− 2	− 1	+ 2	+ 1	0
12	− 3	− 4	− 4	− 3	− 1	− 6	− 7	− 5	− 1	− 3	− 9	− 5	− 5	− 3	− 5	− 4
13	− 7	− 6	− 7	− 5	− 7	− 8	−12	− 8	− 6	− 4	−10	− 7	− 8	− 5	− 9	− 7
14	− 6	− 8	− 9	− 7	−10	− 7	−11	− 6	− 8	− 6	−10	− 7	− 8	− 7	− 9	− 8
15	− 5	− 8	− 9	− 8	− 8	− 7	−10	− 7	− 9	− 5	−10	− 7	− 7	− 8	− 8	− 8
16	− 4	− 8	−11	− 7	− 7	− 6	− 7	−10	− 6	−10	− 9	− 8	− 8	− 7	− 8	− 8
17	− 4	− 8	−12	− 7	− 5	− 6	− 6	− 6	−10	− 4	− 9	− 8	− 7	− 8	− 6	− 7
18	− 4	− 8	−11	− 6	− 5	− 5	− 6	− 8	− 4	− 8	− 7	− 7	− 7	− 5	− 6	− 6
19	− 2	− 6	− 9	− 7	− 2	− 5	− 6	− 5	− 7	− 4	− 9	− 7	− 6	− 7	− 5	− 6
20	− 1	− 4	− 9	− 7	− 3	− 4	− 6	− 5	− 6	− 2	− 8	− 6	− 5	− 6	− 5	− 5
21	− 1	− 5	− 9	− 8	− 4	− 4	− 6	− 5	− 7	− 3	− 7	− 4	− 4	− 7	− 5	− 5
22	+ 1	− 4	− 9	− 7	− 4	− 3	− 6	− 4	− 6	− 3	− 7	− 2	− 3	− 7	− 4	− 4
23	+ 2	− 2	− 8	− 8	− 3	− 1	− 5	− 3	− 4	− 5	− 6	− 2	− 2	− 6	− 3	− 4
24	+ 5	0	− 7	− 7	− 1	− 1	− 4	− 2	− 3	− 2	− 5	− 1	− 1	− 5	− 2	− 2

Bi-hourly values of declination (easterly), 1921.

0° *plus* tabular quantities.

January.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Daily mean.*	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
	′	′	′	′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′
1	18·2	18·1	17·8	18·2	19·3	16·8	16·1	17·5	19·7	19·0	20·6	18·7	18·3	19 40	21·3	11 0	16·1
2†	18·3	18·2	18·0	18·1	20·8	17·8	15·8	16·1	18·3	18·4	18·4	18·4	18·1	8 8	21·4	12 4	15·7
3	18·0	18·0	17·7	18·2	20·6	18·0	15·7	16·7	18·5	18·5	18·4	18·1	18·1	7 40	20·7	11 52	15·5
4	18·0	17·8	17·5	17·7	20·3	18·1	17·3	16·8	18·2	19·3	19·2	18·9	18·3	8 32	20·7	13 24	16·6
5	18·5	17·8	17·7	17·6	19·0	18·7	18·3	18·8	19·1	19·1	18·5	18·2	18·5	9 10	19·7	4 12	17·3
6	18·3	17·9	17·8	17·8	19·1	18·5	17·7	18·3	18·2	18·1	18·2	18·2	18·2	8 44	20·2	10 56	17·5
7	17·9	17·6	17·7	17·5	18·2	18·7	17·5	18·3	19·2	18·4	18·2	17·8	18·1	8 50	19·7	11 56	17·1
8†	18·1	17·8	17·6	17·3	18·3	18·8	17·9	19·0	18·7	18·0	18·1	18·1	18·1	9 20	19·4	6 12	16 9
9	18·1	17·8	17·5	17·1	17·5	18·4	17·8	19·3	19·9	18·1	18·4	18·7	18·2	14 48	20·6	6 56	16·6
10	18·4	17·9	17·7	16·9	17·7	16·6	16·5	18·3	18·4	18·4	18·1	18·0	17·7	14 40	18·8	11 8	16·1
11	18·5	18·4	18·3	17·4	18·1	18·1	18·4	19·5	19·4	17·6	17·8	18·1	18·3	13 48	19·7	5 40	17·2
12	18·2	18·3	17·9	16·8	17·6	17·9	18·2	19·5	19·4	17·5	18·1	18·1	18·2	14 32	19·8	5 40	16·5
13†	18·0	17·8	17·6	17·4	18·1	17·1	17·8	18·2	19·3	17·7	18·2	18·2	17·9	15 56	19·5	10 12	17·0
14†	18·0	18·0	18·1	17·9	19·0	18·0	15·8	16·9	18·6	17·6	18·0	17·9	17·8	8 24	19·3	12 4	15·7
15	17·7	17·6	17·4	17·4	18·7	18·2	16·4	17·9	18·5	18·2	18·1	17·8	17·8	8 28	19·5	11 20	16·2
16	17·6	17·6	17·6	17·4	18·5	17·3	16·2	16·7	18·1	18·0	18·1	18·1	17·6	7 56	18·7	11 40	16·0
17	17·8	17·6	18·2	17·8	18·2	17·1	16·5	17·4	18·3	18·1	18·1	18·3	17·8	16 56	19·5	10 56	15·7
18	18·5	17·8	17·3	18·0	17·5	17·8	17·1	18·3	18·2	18·1	18·4	18·3	17·9	0 20	19·0	11 28	17·1
19	18·2	18·2	18·0	17·9	18·6	17·4	17·2	18·3	18·9	17·9	18·0	17·9	18·0	8 40	19·3	11 36	16·7
20	17·7	17·3	17·3	17·2	17·6	16·9	15·7	17·3	18·1	18·0	18·2	18·0	17·5	19 42	18·3	11 20	15·6
21	18·0	17·8	16·7	17·4	18·3	17·8	16·9	18·6	18·7	17·8	18·3	18·0	17·9	8 40	19·2	3 16	16·5
22†	18·7	17·9	17·4	17·3	17·4	17·6	16·1	17·5	17·9	17·9	17·9	17·8	17·6	1 20	18·9	11 40	16·0
23	17·7	17·7	17·5	17·1	18·4	19·2	17·1	18·7	18·8	17·9	18·0	17·8	18·0	8 48	19·7	5 40	17·1
24	17·9	17·7	17·5	17·3	17·1	17·5	15·9	17·8	19·1	18·6	18·7	18·5	17·9	16 48	20·4	11 58	15·8
25	17·9	17·7	17·5	17·3	17·2	17·7	16·0	18·6	19·4	17·9	18·2	17·9	17·8	13 50	19·5	11 20	15·6
26	17·7	18·1	18·1	17·4	17·3	17·4	16·0	16·9	19·6	18·1	18·4	17·8	17·7	15 48	19·9	11 40	15·9
27	17·8	17·6	16·9	16·8	17·5	17·7	17·6	18·5	19·5	17·7	18·0	17·9	17·8	15 16	19·7	5 28	16·7
28	17·7	17·6	17·5	17·4	17·8	16·6	14·8	16·5	19·2	18·0	18·2	18·0	17·5	16 16	19·5	11 40	14·8
29	18·0	17·7	17·6	17·5	18·9	18·3	16·7	17·7	18·0	18·0	18·1	18·1	17·9	8 36	19·4	11 40	16·6
30	17·9	17·8	17·7	17·8	19·3	19·2	15·4	16·1	17·6	17·9	18·1	17·9	17·7	8 50	20·0	12 4	15·1
31	17·8	17·7	17·2	17·3	18·2	18·6	16·4	16·7	18·5	18·4	18·1	18·3	17·7	9 8	19·0	12 52	16·0
Mean	18·0	17·8	17·6	17·5	18·4	17·9	16·7	17·8	18·8	18·1	18·3	18·1	17·9				
Mean†	18·2	17·9	17·7	17·6	18·7	17·9	16·7	17·5	18·6	17·9	18·1	18·1	17·9				

February.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Daily mean.*	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
	′	′	′	′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′
1	17·9	17·5	17·4	17·4	18·4	18·4	16·8	17·4	18·6	18·2	18·3	18·3	17·9	8 50	19·1	12 0	16·4
2	17·5	17·7	17·6	17·3	18·5	19·2	17·5	18·0	18·7	18·2	19·1	18·4	18·1	9 0	19·3	5 48	17·2
3	17·8	17·8	17·8	17·5	17·3	17·7	17·5	17·6	18·4	17·8	17·9	17·8	17·7	16 4	18·5	7 52	16·6
4	17·7	17·7	17·5	17·4	17·7	19·0	18·3	18·5	18·7	17·8	17·7	17·5	17·9	10 28	19·2	6 50	17·3
5	18·0	18·2	17·6	17·6	17·3	17·2	15·8	16·7	19·1	17·9	18·3	18·9	17·7	15 42	19·3	12 24	15·4
6	18·2	18·3	17·5	17·0	16·9	16·5	16·4	17·8	18·3	17·8	18·4	17·9	17·6	0 36	18·7	11 24	16·3
7	18·1	18·0	17·2	17·3	17·5	16·9	15·6	17·8	19·2	17·9	17·9	17·6	17·5	15 44	19·4	11 44	15·5
8†	17·8	17·9	17·7	17·6	17·3	17·4	16·7	17·7	18·4	18·1	17·9	17·9	17·7	15 20	18·7	11 32	16·4
9†	17·9	17·8	17·6	17·2	17·4	17·9	15·9	16·5	17·5	17·8	17·9	17·7	17·4	9 8	18·5	12 20	15·7
10	17·6	17·7	17·4	17·2	17·7	17·4	15·9	17·3	18·4	17·7	17·4	17·6	17·4	15 20	18·6	12 12	15·8
11	17·7	17·5	17·5	17·5	17·9	18·2	17·3	17·0	17·6	17·8	17·9	17·7	17·6	9 8	18·4	12 48	16·7
12†	17·7	17·5	17·3	17·3	17·9	18·5	17·0	17·9	18·1	17·7	17·9	17·5	17·7	9 16	19·2	12 4	16·8
13	17·6	17·7	17·4	17·0	17·5	17·9	16·9	17·4	17·9	17·8	17·9	17·6	17·5	20 46	18·3	7 0	16·4
14	17·8	17·8	18·0	18·1	17·6	17·8	16·9	17·4	18·7	18·4	18·2	17·9	17·8	16 40	19·0	12 40	16·4
15	17·9	18·2	18·2	18·1	18·0	18·7	16·6	16·5	17·3	17·8	18·0	17·9	17·7	9 44	18·7	12 40	15·8
16†	17·9	17·9	17·6	17·6	18·8	18·2	17·0	16·7	17·4	17·7	17·9	17·8	17·7	8 20	19·0	12 56	16·4
17	17·6	17·7	17·5	17·5	18·0	15·8	14·0	15·6	17·3	17·7	17·9	17·7	18·0	7 48	18·1	11 44	13·8
18	17·5	17·5	17·3	16·9	17·7	17·8	15·7	17·2	17·4	18·0	17·7	17·7	17·4	9 4	18·2	11 56	15·4
19	17·9	17·6	17·3	17·0	18·2	18·2	16·1	16·9	17·6	18·0	17·7	17·8	17·5	8 58	18·9	12 28	16·0
20	17·7	17·4	17·3	17·3	17·8	16·9	15·7	15·2	17·5	17·3	17·2	17·0	17·7	7 56	17·9	13 44	14·5
21	17·3	17·3	17·3	16·8	17·9	18·8	16·8	16·2	17·8	17·7	17·9	17·5	17·5	9 28	19·3	13 50	16·2
22	17·6	17·5	17·1	17·2	17·8	18·1	15·1	16·2	17·7	17·4	17·6	17·5	17·3	8 58	18·5	11 58	14·6
23†	17·6	17·5	17·4	17·3	17·9	18·8	16·5	16·3	17·3	17·2	17·4	17·3	17·4	9 24	19·1	13 0	15·9
24	17·6	17·5	17·4	17·3	18·6	18·6	15·0	14·8	16·8	17·3	17·3	17·2	17·1	8 58	19·9	13 4	13·8
25	17·3	17·4	16·9	16·8	18·3	18·9	17·7	15·5	16·3	17·4	17·8	17·4	17·3	8 50	19·4	14 20	15·3
26	17·8	17·7	17·3	17·3	18·5	20·3	16·4	15·0	16·7	17·5	17·6	17·4	17·5	9 56	20·5	12 44	14·7
27	17·7	17·6	17·4	17·2	18·2	18·8	16·1	15·5	16·4	17·6	17·7	17·5	17·3	9 20	19·2	13 8	15·1
28	17·6	17·4	16·9	17·1	17·7	18·8	16·8	16·6	16·6	17·6	17·2	17·4	17·3	9 36	18·8	15 24	15·9
Mean	17·7	17·7	17·4	17·3	17·9	17·7	16·4	16·8	17·8	17·8	17·8	17·7	17·5				
Mean†	17·8	17·7	17·5	17·4	17·9	18·2	16·6	17·0	17·7	17·7	17·8	17·6	17·6				

* The daily mean ordinate derived from 24 hourly tabulations of the declination magnetograms and corrected for progressive change by 1·48 of the difference between the initial and the terminal hour (ah to oh) are next corrected into angle by factor 10′·28 which is equal to 1 cm. of ordinate on the photographic paper; and finally these converted ordinates added to the adopted base line values give the absolute values of the daily means of declination.

† Five international quiet days.

0° *plus* tabular quantities.

March

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Daily mean.*	Maximum. Time.	Mag.	Minimum. Time.	Mag.
	′	′	′	′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′
1 ..	17·7	17·4	17·1	16·6	16·8	17·2	16·7	15·4	16·3	18·0	17·8	17·4	17·1	18 4	18·4	13 44	15·3
2 ..	17·3	17·4	17·2	16·8	17·8	18·3	17·2	16·7	17·2	17·5	17·9	17·3	17·4	9 14	18·7	13 16	16·6
3 ..	17·3	17·2	17·3	17·0	17·4	18·2	17·0	16·0	16·6	17·3	17·6	17·3	17·2	9 24	18·4	13 8	16·0
4 ..	17·8	17·4	16·8	17·0	18·5	18·5	17·6	16·7	17·1	17·6	17·7	17·4	17·4	8 50	19·0	14 36	16·0
†5 ..	17·4	17·3	17·4	17·4	18·3	19·0	16·7	15·1	16·7	17·4	17·3	17·2	17·3	9 8	19·4	13 34	15·0
6 ..	17·2	17·1	17·1	17·1	18·4	18·7	16·6	15·5	16·7	17·7	17·3	17·2	17·2	9 36	19·0	13 28	15·4
7 ..	17·2	17·0	16·6	16·7	18·1	19·3	17·2	16·0	17·8	17·6	17·1	17·3	17·4	9 36	19·6	13 48	15·9
†8 ..	17·3	17·3	17·1	17·0	18·1	19·3	16·5	16·3	17·4	17·5	16·9	17·1	17·3	9 56	19·5	12 44	15·6
9 ..	17·1	17·2	17·0	16·6	17·7	19·7	18·1	17·1	18·1	17·4	16·7	16·9	17·4	9 48	19·8	6 28	16·4
10 ..	17·7	17·7	16·6	16·5	17·5	18·5	16·6	16·8	17·5	17·4	17·2	17·5	17·3	9 0	18·6	5 4	16·0
11 ..	17·7	17·5	17·0	16·8	17·5	18·7	17·8	15·5	16·4	16·6	16·5	16·6	17·1	10 32	19·1	13 32	15·5
12 ..	17·2	17·1	16·6	16·5	17·0	18·4	17·0	18·3	17·2	17·3	17·1	17·0	17·0	9 58	18·6	13 40	15·0
13 ..	17·4	17·0	16·8	16·5	17·6	18·5	16·3	15·7	17·6	17·4	17·0	16·9	17·1	8 58	18·7	13 20	15·1
14 ..	16·9	17·0	16·6	17·0	18·3	19·4	18·0	17·3	17·8	17·1	17·1	17·6	17·5	9 0	19·6	4 20	16·5
15 ..	17·5	17·5	17·5	17·0	18·4	19·0	17·3	17·2	17·6	17·0	17·1	17·5	17·6	8 58	19·1	13 8	16·5
16 ..	18·4	18·0	17·6	18·0	19·4	18·4	17·8	16·0	17·1	17·4	17·6	17·5	17·7	8 6	19·6	13 56	15·9
†17 ..	17·5	17·5	17·5	17·5	18·0	18·6	16·5	15·6	17·5	17·8	17·3	17·1	17·3	9 40	19·1	13 8	15·4
18 ..	17·3	17·3	17·2	17·1	17·5	18·0	16·6	15·3	17·0	17·8	17·1	17·4	17·1	8 50	18·1	13 8	14·9
†19 ..	17·5	17·5	17·1	17·4	18·5	18·8	17·2	16·5	18·0	17·4	17·1	17·0	17·5	8 56	19·3	13 8	16·4
†20 ..	17·2	17·3	17·1	17·0	18·5	18·4	17·5	16·9	17·4	17·4	17·1	17·2	17·4	8 32	19·1	14 0	16·5
21 ..	17·2	17·4	17·2	17·1	18·6	18·4	16·3	15·6	16·3	16·5	16·4	17·8	17·1	8 58	19·0	12 56	15·5
22 ..	17·3	16·9	16·7	16·4	18·2	18·9	18·4	16·4	18·1	18·1	16·7	17·2	17·5	10 4	19·3	5 24	16·0
23 ..	17·9	17·6	17·4	17·6	18·3	19·5	18·6	15·6	17·0	17·2	17·2	17·2	17·5	10 36	19·8	14 0	15·3
24 ..	17·3	17·4	17·3	16·9	17·8	19·3	16·8	15·4	17·0	17·1	16·7	16·8	17·1	9 58	19·5	13 24	15·3
25 ..	16·9	17·9	17·3	17·1	19·0	19·0	15·9	15·2	17·2	17·8	16·9	17·0	17·4	8 28	19·7	13 20	14·7
26 ..	17·2	17·0	16·3	17·2	19·0	19·1	16·9	16·3	16·9	17·8	17·6	17·3	17·1	8 50	20·0	13 20	15·7
27 ..	17·3	17·4	17·2	17·1	18·3	19·4	17·3	15·4	17·7	18·3	17·4	17·9	17·5	9 40	19·6	13 50	15·3
28 ..	18·2	17·3	17·3	17·3	18·3	18·2	17·4	15·3	16·3	17·0	17·2	17·4	17·3	8 40	18·5	13 40	14·8
29 ..	17·3	17·3	17·1	16·6	18·3	19·7	18·6	16·2	17·3	18·3	16·9	17·0	17·7	10 18	20·6	13 36	16·3
30 ..	17·5	17·0	16·7	16·8	18·7	19·7	17·8	16·3	16·9	17·3	16·8	17·0	17·4	10 4	20·2	13 56	16·2
31 ..	17·0	17·1	16·9	16·7	18·7	20·2	17·5	15·9	17·0	17·3	16·9	17·0	17·3	9 28	20·4	13 44	15·9
Mean ..	17·4	17·3	17·1	17·0	18·1	18·8	17·2	16·1	17·2	17·5	17·1	17·2	17·3				
†Mean ..	17·4	17·4	17·2	17·3	18·3	18·8	16·9	16·1	17·4	17·5	17·1	17·1	17·4				

April

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Daily mean.*	Maximum. Time.	Mag.	Minimum. Time.	Mag.
	′	′	′	′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′
1 ..	17·0	17·2	17·0	16·7	18·3	18·6	15·8	15·8	17·7	17·1	17·0	17·1	17·1	8 28	18·9	12 36	14·9
2 ..	17·3	17·2	17·0	16·7	17·9	17·8	16·1	14·9	17·0	17·5	16·8	17·0	16·9	8 58	18·1	13 12	14·6
3 ..	17·3	17·1	16·9	16·7	18·1	18·0	15·9	16·1	16·3	16·2	17·0	17·0	16·9	8 24	18·5	12 36	14·9
†4 ..	17·4	17·3	17·3	17·1	18·2	17·7	16·0	15·4	16·4	16·7	16·4	16·8	16·9	8 40	18·4	13 44	15·3
†5 ..	16·9	16·9	17·0	16·9	17·8	17·8	16·3	15·9	17·0	16·7	16·4	16·7	16·8	9 36	18·1	13 32	15·7
6 ..	17·0	17·3	17·4	17·0	18·2	19·9	16·2	15·5	16·8	16·7	16·2	16·8	17·1	9 44	20·0	13 16	14·9
†7 ..	17·0	17·1	16·9	17·0	18·3	19·2	16·0	15·1	16·1	16·2	16·1	16·5	16·8	9 28	19·4	13 28	14·9
8 ..	16·8	17·0	16·7	16·4	18·6	18·9	16·4	15·8	17·0	17·0	17·9	17·3	16·9	17·2	9 8	19·5	13 16
9 ..	16·8	16·9	16·6	17·1	18·5	17·6	15·9	14·4	16·0	16·7	16·5	16·9	16·7	7 48	18·6	13 34	14·2
10 ..	17·5	17·4	17·2	16·8	17·6	18·6	16·6	15·7	16·6	17·2	16·7	16·9	17·1	9 38	18·7	12 48	15·6
11 ..	17·3	17·8	17·7	17·7	18·5	18·0	15·5	15·3	16·3	16·9	15·9	16·3	16·9	9 8	18·7	12 20	14·7
12 ..	16·8	17·2	17·1	17·0	18·6	19·4	16·5	15·8	16·6	17·0	15·3	16·1	17·0	9 4	19·8	19 40	14·9
13 ..	16·8	16·7	16·3	16·0	17·0	18·4	16·3	16·1	18·0	17·6	17·1	17·0	16·9	9 52	18·5	13 16	15·9
14 ..	17·6	17·5	17·5	17·8	17·8	16·2	15·2	15·9	16·7	16·8	16·6	16·9	16·9	6 44	18·3	11 8	15·0
15 ..	17·5	18·0	17·7	18·0	18·2	17·0	15·1	15·1	16·5	16·9	17·3	17·3	17·0	6 18	18·6	12 24	14·5
16 ..	17·4	17·4	17·0	17·1	18·5	17·1	15·1	15·3	16·0	16·3	17·1	17·5	16·8	7 20	18·7	13 14	14·8
17 ..	17·7	16·8	16·6	17·2	18·6	17·9	15·8	14·7	15·5	16·4	16·2	16·8	16·7	8 12	18·9	14 54	14·3
18 ..	17·1	17·1	16·7	17·1	18·6	17·5	15·5	14·9	16·0	16·6	15·2	15·7	16·5	7 12	18·7	19 28	14·5
19 ..	16·0	16·7	15·9	17·0	18·7	17·6	16·2	15·2	16·6	17·3	16·6	16·8	16·7	8 6	18·9	13 14	14·8
20 ..	16·8	16·7	16·7	17·4	18·6	16·9	14·9	15·2	17·4	17·6	16·7	16·9	16·9	7 32	18·8	11 58	14·7
21 ..	16·9	17·0	16·2	16·8	18·3	15·4	13·7	14·4	15·9	18·0	16·5	16·9	16·3	7 6	18·5	11 32	13·3
22 ..	16·6	16·6	16·6	17·3	18·5	18·1	14·1	13·7	15·6	16·6	16·5	16·4	16·3	7 40	18·8	12 28	13·3
23 ..	16·4	16·7	16·4	16·7	19·9	16·7	13·4	14·2	16·1	16·9	16·0	16·7	16·4	8 20	20·1	12 18	13·0
24 ..	16·9	16·7	16·5	16·9	18·4	17·7	16·5	15·1	15·9	16·7	16·2	16·4	16·7	8 24	18·9	14 24	15·0
25 ..	16·6	16·6	16·6	17·0	17·8	16·1	14·7	14·7	16·6	16·8	15·9	16·4	16·4	7 36	18·0	13 4	14·1
†26 ..	16·6	16·7	16·5	16·7	18·4	16·8	13·9	14·0	16·3	16·1	15·8	16·1	16·2	8 4	18·7	12 56	13·4
†27 ..	16·5	17·0	16·7	17·0	18·3	16·1	13·4	13·6	15·1	15·7	15·7	16·0	15·9	7 32	18·5	11 50	13·4
28 ..	16·5	16·6	16·6	17·0	17·5	16·6	14·9	14·4	15·6	16·4	15·8	16·0	16·1	6 56	17·9	12 56	14·0
29 ..	16·3	16·3	16·7	17·0	17·6	17·0	14·7	14·2	16·8	17·2	18·3	16·2	16·6	20 36	18·6	13 8	12·9
30 ..	17·2	17·2	17·3	17·8	17·6	16·0	14·1	15·9	17·4	16·9	15·9	16·4	16·6	6 22	18·4	11 40	13·9
Mean ..	16·9	17·0	16·8	17·0	18·2	17·6	15·4	15·1	16·5	16·9	16·4	16·6	16·7				
† Mean..	16·9	17·0	16·9	16·9	18·2	17·5	15·1	14·8	16·2	16·3	16·1	16·4	16·5				

* *See* footnote on page 48. † Five international quiet days.

Bi-hourly values of declination (easterly), 1921.

0° *plus* tabular quantities.

May .

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Daily mean.*	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
	′	′	′	′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′
1 ..	16·6	16·8	16·9	17·8	19·2	17·6	15·6	15·8	17·1	17·6	16·4	16·5	17·0	7 16	19·4	12 56	15·3
2 ..	16·5	16·9	16·8	17·7	17·5	15·3	13·7	14·4	16·2	16·8	16·2	16·4	16·2	7 16	18·1	11 56	13·5
3 ..	16·5	16·8	16·6	17·7	18·6	17·0	14·2	14·6	15·4	15·4	15·8	16·3	16·3	7 50	18·6	12 8	13·7
4 ..	17·2	17·3	17·3	17·3	20·2	18·2	15·3	14·9	16·0	16·7	16·5	16·5	17·0	8 28	20·4	13 40	14·5
†5 ..	16·6	16·6	16·5	17·6	19·5	16·8	13·9	14·7	16·8	16·9	16·2	16·4	16·5	8 4	19·7	12 0	13·3
†6 ..	16·6	16·7	16·8	17·8	19·5	17·2	14·9	15·9	16·8	16·9	15·9	16·3	16·7	8 0	19·6	12 36	14·5
†7 ..	16·4	16·5	16·7	17·7	19·5	16·4	13·4	14·3	15·9	16·9	16·2	16·0	16·3	7 50	19·5	12 40	13·1
8 .	16·6	16·8	16·8	18·0	19·3	15·9	14·8	15·5	16·4	16·6	15·8	16·6	16·6	7 32	19·5	10 58	14·3
9 ..	16·6	17·6	17·7	18·2	20·6	16·2	13·9	14·9	16·8	17·0	16·4	16·7	16·9	7 46	20·7	12 28	13·2
10 ..	17·1	17·0	17·2	17·7	19·2	15·7	14·9	15·8	16·7	17·0	16·2	15·9	16·7	7 20	19·5	10 56	14·2
11 ..	16·4	17·1	17·1	17·8	19·0	17·2	14·7	14·2	14·9	16·4	15·7	15·9	16·4	8 24	19·2	13 48	13·9
12 ..	16·5	16·5	16·6	17·7	19·2	16·4	13·0	12·3	14·8	15·8	15·9	16·2	15·9	7 44	19·2	13 40	10·5
13 ..	16·9	17·5	17·5	17·8	19·0	17·7	15·5	15·9	17·3	15·8	13·4	15·5	16·6	8 16	19·1	19 56	12·7
14 ..	16·7	18·7	21·6	20·3	22·2	17·7	16·4	16·6	16·7	18·1	16·9	17·5	18·3	6 50	23·0	11 12	14·5
15 ..	18·3	19·2	13·2	18·2	18·0	34·5	26·3	24·4	23·7	20·6	18·4	19·0	19·3	8 36	41·9	4 14	12·4
16 ..	19·0	19·4	19·9	19·2	19·7	17·1	16·8	19·2	20·9	20·3	16·3	16·8	18·5	15 56	21·7	10 22	15·1
17 ..	17·9	18·5	18·4	18·5	18·0	16·4	15·5	16·6	16·9	17·3	17·2	17·4	17·4	4 16	19·9	11 24	15·1
18 ..	17·4	17·7	17·7	18·7	20·7	17·8	14·9	16·0	17·8	18·2	17·2	17·3	17·6	7 30	20·9	12 16	14·6
19 ..	17·5	17·4	17·7	18·4	22·3	17·6	15·4	15·8	16·9	17·5	16·7	16·8	17·4	7 56	22·4	12 24	14·9
20 ..	17·2	16·3	15·9	18·4	20·6	17·6	15·0	15·0	17·3	17·7	14·5	14·6	16·7	7 44	20·8	2 20	13·9
21 ..	18·2	18·2	18·3	19·2	19·7	16·9	15·2	16·2	16·4	16·7	15·0	16·6	17·2	7 8	19·9	11 44	15·0
22 ..	17·0	17·7	17·6	18·9	19·4	15·8	13·7	14·4	15·3	16·8	15·9	16·6	16·6	7 4	19·8	12 8	13·2
23 ..	17·6	17·1	17·6	18·3	19·2	16·4	14·5	15·1	16·6	16·9	16·5	16·7	16·9	7 28	19·5	12 10	13·9
24 ..	17·2	17·2	17·6	18·7	19·2	16·7	14·6	14·6	15·9	16·9	16·2	16·4	16·8	6 42	19·8	12 44	13·9
†25 ..	16·8	17·0	17·2	18·3	19·1	16·7	14·6	14·9	16·3	16·7	16·3	16·7	16·7	6 44	19·3	12 48	14·2
26 ..	16·8	17·1	16·9	17·8	18·7	17·0	15·1	14·2	15·6	15·5	15·5	16·2	16·4	7 50	18·8	13 44	14·1
27 ..	16·8	17·0	16·5	17·6	18·4	16·2	14·8	14·9	15·6	16·0	16·0	16·2	16·4	6 40	18·7	11 6	14·3
28 ..	17·2	17·5	17·5	17·9	19·4	17·5	14·3	15·6	16·5	16·5	16·0	16·5	16·8	7 40	20·4	12 28	13·7
29 ..	17·3	16·9	16·9	18·6	20·2	17·0	15·3	14·7	16·4	17·1	16·3	16·5	16·9	7 48	20·4	13 0	14·0
†30 ..	16·7	16·9	17·1	18·0	19·6	16·8	13·9	14·5	16·0	16·7	16·1	16·7	16·5	7 4	19·8	12 16	13·7
31 ..	16·6	16·8	16·8	18·1	18·2	15·5	14·2	15·1	16·5	16·7	16·3	16·2	16·4	7 16	18·9	11 36	13·7
Mean ..	17·0	17·1	17·2	18·1	19·4	16·7	14·6	15·1	16·3	16·8	16·1	16·4	16·7				
†Mean ..	16·6	16·7	16·9	17·9	19·4	16·8	14·1	14·9	16·4	16·8	16·1	16·4	16·5				

June .

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Daily mean.*	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
	′	′	′	′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′
1 ..	16·7	17·0	16·9	17·7	19·0	17·0	14·6	14·8	16·4	16·0	16·0	16·3	16·5	7 6	19·1	12 56	14·0
2 ..	16·6	13·9	16·9	17·9	18·4	16·3	15·8	15·8	15·8	15·7	16·1	16·4	16·6	7 4	18·7	17 4	15·4
3 ..	16·7	16·8	16·9	18·7	18·3	14·9	13·8	15·6	16·5	15·3	15·2	15·8	16·2	6 40	19·3	11 58	13·7
4 ..	16·6	16·9	17·4	18·3	18·4	15·9	14·3	15·1	16·3	16·2	15·9	16·7	16·5	6 16	19·7	12 4	14·2
†5 ..	17·1	17·2	17·5	18·7	18·5	17·8	16·0	16·0	17 5	17·0	16·5	16·8	17·1	7 20	19·3	12 52	15·5
6 ..	16·9	17·0	17·1	17·8	17·8	15·2	13·2	14·9	17·0	16·6	16·2	17·1	16·3	7 0	18·6	11 40	12·9
7 ..	17·0	17·5	17·4	19·3	19·7	16·2	13·4	13·9	15·8	16·1	15·3	16·0	16·5	7 4	20·3	12 46	13·0
8 ..	17·0	17·2	16·8	18·5	19·3	17·0	14·5	13·0	14·9	16·0	15·7	15·8	16·3	7 24	19·7	12 50	12·5
9 ..	16·3	16·6	15·9	17·9	18·6	16·8	15·2	14·5	15·4	16·2	14·9	15·8	16·3	6 50	19·2	14 52	14·2
10 ..	16·6	17·3	17·2	18·5	18·9	16·9	14·7	13·3	15·0	16·6	15·9	16·1	16·5	7 4	19·6	12 56	13·3
11 ..	16·5	16·4	16·8	17·5	18·5	16·6	14·4	14·2	15·3	16·1	15·9	16·2	16·3	7 0	18·7	13 28	14·0
12 ..	16·2	16·5	16·6	17·6	18·4	16·0	14·1	15·2	16·1	16·4	16·5	16·6	16·3	7 0	18·5	12 8	13·6
13 ..	16·2	16·2	16·4	17·4	18·3	16·4	14·2	14·5	15·5	16·2	15·7	15·6	16·1	7 24	18·7	12 28	14·1
14 ..	16·4	16·5	16·7	18·1	18·3	15·6	13·4	14·2	16·0	15·9	15·7	16·6	16·1	6 34	19·0	11 38	13·4
†15 ..	16·5	16·6	16·9	18·0	18·3	16·9	14·3	14·7	16·6	16·3	15·7	16·0	16·4	6 56	18·5	12 36	13·8
16 ..	16·3	16·5	16·6	17·7	18·4	15·7	13·1	13·0	16·1	16·0	15·8	15·7	15·9	7 52	18·7	13 34	11·7
17 ..	16·1	16·3	16·5	17·2	19·2	17·8	15·3	15·3	15·8	16·3	16·3	15·7	16·4	8 8	19·3	13 0	14·3
†18 ..	16·3	16·3	16·1	17·4	18·4	16·2	14·4	14·3	15·7	15·8	15·6	15·6	16·0	7 42	18·6	12 44	13·4
†19 ..	16·0	16·2	16·5	17·6	18·4	17·3	13·8	14·4	16·0	15·8	15·0	15·2	16·0	7 28	18·5	12 4	13·3
20 ..	16·2	16·7	16·7	17·8	18·9	16·8	14·0	14·2	15·4	15·7	15·1	15·5	16·1	8 4	19·1	12 56	12·6
21 ..	16·0	16·6	16·8	18·0	18·5	16·3	13·4	13·6	15·8	16·6	15·8	16·3	16·2	6 40	18·6	12 56	12·7
22 ..	16·7	16·7	16·9	17·4	19·0	17·4	14·3	13·4	14·5	16·0	16·0	16·1	16·2	7 44	19·1	13 16	12·6
23 ..	16·3	16·8	16·5	17·1	18·3	16·6	14·1	13·1	15·3	15·6	14·4	15·2	15·8	8 28	18·4	12 44	12·8
24 ..	16·5	16·8	16·5	17·6	18·8	15·4	13·1	13·8	15·4	15·8	15·5	15·7	15·9	7 20	19·1	12 50	13·1
†25 ..	16·1	16·5	16·7	17·7	18·8	16·9	14·5	14·1	15·4	15·9	15·5	15·7	16·2	7 50	18·9	13 32	13·7
26 ..	16·1	16·3	16·4	17·4	18·2	17·2	14·9	14·5	15·4	16·1	15·7	16·3	16·2	7 56	18·3	13 28	14·5
27 ..	17·1	16·9	17·0	17·7	18·9	16·6	14·3	15·6	15·8	16·1	15·5	15·8	16·3	7 40	19·0	12 40	14·1
28 ..	16·0	16·4	16·6	17·4	17·9	16·4	15·0	15·6	15·9	16·3	16·1	16·0	16·3	7 4	18·2	11 52	14·6
29 ..	16·1	16·0	16·3	16·9	18·6	16·4	14·1	14·3	15·4	15·9	16·0	15·9	16·0	7 56	18·7	12 52	13·7
30 ..	16·4	16·8	17·0	18·3	18·5	16·7	13·9	14·1	16·0	16·3	15·9	16·3	16·4	6 56	19·2	12 4	13·6
Mean ..	16·5	16·7	16·7	17·8	18·6	16·5	14·3	14·4	15·8	16·1	15·7	16·0	16·3				
† Mean	16·4	16·6	16·7	17·9	18·5	17·0	14·6	14·7	16·2	16·2	15·7	15·9	16·3				

* *See* foot-note on page 48.

May 12th to 16th are excluded in deriving the hourly and monthly means, the days being highly disturbed.

† Five international quiet days.

Bi-hourly values of declination (easterly), 1921.

0° *plus* tabular quantities.

July.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Daily mean.*	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
	′	′	′	′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′
1 ..	16·6	16·7	16·8	17·2	18·7	16·9	13·8	13·1	14·6	16·2	15·7	16·1	16·1	7 50	18·8	13 40	13·0
†2 ..	16·4	16·7	16·7	17·7	17·9	15·9	15·1	15·3	15·2	15·7	15·8	15·7	16·2	6 52	18·6	12 15	15·0
3 ..	16·3	16·4	16·8	17·6	18·1	16·0	13·1	14·3	15·7	16·0	15·5	16·1	16·0	7 24	18·4	11 44	12·8
4 ..	16·9	16·9	17·3	18·6	17·5	15·3	13·8	14·5	15·3	15·2	15·1	15·9	16·0	6 12	18·8	11 56	13·6
5 ..	16·5	16·6	17·1	18·1	19·2	16·9	14·0	14·8	15·6	15·6	15·5	15·9	16·3	7 48	19·3	11 46	13·9
6 ..	16·2	16·4	16·8	18·1	18·1	15·7	13·0	13·9	16·6	16·0	15·1	15·5	15·9	7 4	18·5	12 16	12·0
7 ..	16·2	16·7	16·6	17·8	19·3	17·4	10·6	10·9	14·1	17·0	16·2	16·0	15·7	8 4	19·8	12 49	9·5
8 ..	16·0	16·7	16·7	17·8	17·9	17·0	14·3	14·5	16·3	16·6	15·9	16·1	16·3	6 24	18·5	12 36	14·2
9 ..	16·1	16·4	16·3	16·7	18·3	18·0	15·1	14·3	15·3	15·6	16·3	16·1	16·1	8 24	18·8	13 32	14·0
10 ..	16·1	16·4	16·3	17·5	18·5	17·2	15·1	14·4	15·5	15·8	15·6	15·8	16·2	7 56	18·6	14 4	14·2
†11 ..	16·3	16·3	16·3	16·7	17·8	16·3	13·4	13·5	15·0	15·7	15·5	15·7	15·7	7 36	18·1	12 0	13·3
12 ..	16·2	16·4	16·4	17·0	18·4	16·7	15·9	15·3	15·3	15·9	15·6	15·9	16·3	7 30	18·6	14 24	15·1
13 ..	16·0	16·4	16·6	17·0	17·0	16·1	14·5	14·6	14·7	16·0	15·1	15·7	15·9	6 24	17·7	12 14	14·3
14 ..	16·6	17·2	16·3	17·4	17·6	16·7	14·9	15·2	15·9	16·0	15·3	15·5	16·1	6 48	18·0	12 24	14·4
15 ..	15·7	16·1	16·7	18·0	18·6	17·1	14·5	14·8	15·6	15·8	15·2	15·7	16·1	7 4	18·8	14 8	14·0
16 ..	16·7	17·0	17·1	17·7	19·3	17·6	15·7	15·3	14·7	15·7	15·6	15·7	16·5	7 4	19·5	14 28	14·7
17 ..	16·0	16·6	16·7	17·5	17·7	16·1	14·6	14·0	14·5	15·7	15·2	15·6	15·9	6 12	18·0	13 24	13·9
†18 ..	16·4	16·8	17·0	17·4	18·1	16·1	13·2	15·0	16·0	16·3	15·7	16·0	16·2	7 20	18·3	11 56	13·1
19 ..	16·2	16·3	16·3	17·1	17·2	15·4	13·6	14·1	14·1	15·2	15·5	15·7	15·5	6 40	17·4	12 0	13·5
20 ..	16·4	16·4	16·7	18·0	18·8	17·3	13·7	14·6	16·0	15·7	15·5	15·6	16·2	7 4	19·2	11 44	13·6
†21 ..	16·2	16·5	16·6	17·4	19·1	16·7	14·6	14·6	14·7	16·1	15·5	15·6	16·1	7 36	19·3	14 28	13·9
22 ..	15·9	16·2	16·0	16·9	17·6	14·8	12·6	13·7	14·4	15·7	15·7	15·8	15·4	7 4	18·0	11 26	12·5
23 ..	15·9	16·4	16·7	17·5	19·2	16·3	13·8	14·9	15·3	16·0	15·8	15·6	16·1	7 36	19·3	12 24	13·7
24 ..	15·7	15·9	16·0	16·7	17·3	14·7	12·1	13·2	15·1	15·5	15·4	15·4	15·3	6 50	17·8	12 20	11·5
†25 ..	15·9	16·4	16·9	18·1	17·9	16·4	14·6	13·4	14·8	15·9	14·9	15·2	15·9	6 56	18·7	13 56	13·1
26 ..	15·6	16·1	16·3	17·2	18·1	16·6	13·5	13·6	15·2	15·5	15·1	15·1	15·6	7 50	18·1	12 44	12·7
27 ..	15·7	15·8	16·4	16·8	18·2	16·1	12·7	13·3	15·0	15·1	14·4	15·3	15·4	7 40	18·4	12 48	12·5
28 ..	15·9	16·2	16·1	16·8	17·7	15·8	14·4	15·0	14·8	15·2	15·1	15·5	15·7	8 20	17·9	15 2	14·1
29 ..	16·0	16·3	16·5	17·5	18·7	14·8	13·6	14·1	17·1	16·3	15·2	15·5	16·0	7 40	18·9	11 44	13·3
30 ..	15·9	16·3	16·8	17·0	17·9	15·9	14·1	14·2	15·0	15·6	14·8	15·5	15·8	7 28	18·1	12 0	13·8
31 ..	16·1	16·6	16·4	17·7	18·4	16·7	12·7	13·4	15·9	16·3	15·3	15·5	15·9	7 16	18·6	11 50	12·7
Mean ..	16·1	16·5	16·6	17·4	18·2	16·3	13·9	14·2	15·3	15·8	15·4	15·7	15·9				
†Mean..	16·2	16·5	16·7	17·5	18·2	16·3	14·2	14·4	15·1	15·9	15·5	15·6	16·0				

August.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Daily mean.*	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
	′	′	′	′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′
†1 ..	15·9	16·1	16·2	16·9	17·1	13·8	12·7	14·2	15·7	16·4	15·2	15·2	15·5	7 4	17·5	11 56	12·6
2 ..	15·6	16·0	15·9	17·7	19·0	15·5	12·5	13·5	16·5	16·1	14·7	14·7	15·7	7 2	19·4	12 16	11·9
3 ..	15·3	16·3	16·8	18·0	19·2	14·7	12·9	14·7	16·2	17·1	15·5	15·6	16·1	7 10	19·9	12 8	12·8
4 ..	15·8	16·2	16·4	18·2	19·3	16·2	13·1	13·1	15·3	16·3	15·6	15·5	15·8	7 4	19·7	12 52	12·2
5 ..	15·6	15·9	16·0	17·4	18·4	16·6	14·6	13·8	15·6	16·5	16·0	15·6	16·0	7 40	19·0	12 48	13·1
6 ..	15·8	16·2	16·4	17·2	18·2	16·3	13·8	13·8	15·1	16·2	15·5	15·2	15·8	6 56	18·5	13 4	12·9
7 ..	15·3	15·7	15·9	17·7	18·4	15·9	13·7	13·6	16·0	16·9	15·9	15·6	15·9	6 48	18·9	13 20	13·3
8 ..	15·5	15·6	15·9	17·3	18·4	14·4	12·9	12·7	14·2	15·3	15·3	15·0	15·2	7 12	18·5	13 32	12·6
†9 ..	15·2	15·3	15·5	16·6	18·4	17·4	14·2	14·3	15·6	15·7	15·1	15·0	15·7	7 30	18·6	12 0	13·7
10 ..	15·2	15·6	15·4	15·9	16·0	14·4	13·3	13·6	14·2	15·0	14·8	15·0	14·8	6 44	16·6	12 40	12·6
11 ..	15·3	15·5	15·7	16·6	18·0	15·1	13·6	12·9	15·0	15·6	15·3	15·4	15·2	7 26	18·1	13 44	12·8
12 ..	15·3	16·2	16·2	17·1	17·5	14·7	13·6	13·8	14·8	15·5	14·8	15·1	15·5	6 58	18·2	11 34	13·0
13 ..	15·3	15·5	15·9	16·6	18·0	15·4	13·4	13·4	14·8	15·2	14·9	15·1	15·3	7 40	18·1	12 44	12·8
14 ..	15·4	15·6	15·6	17·0	18·3	15·5	13·4	13·4	14·8	15·1	14·8	14·7	15·2	7 20	18·5	12 52	12·9
15 ..	15·0	15·4	15·7	16·1	17·6	15·3	13·8	14·5	14·3	14·9	14·0	14·9	15·2	7 46	17·7	11 40	13·7
16 ..	15·7	15·9	16·2	17·8	17·3	13·7	12·6	12·8	15·1	16·2	15·1	15·2	15·3	6 44	18·6	12 40	12·2
17 ..	15·2	15·5	15·7	17·1	18·0	15·4	13·1	13·4	15·9	16·3	15·7	15·4	15·5	7 20	18·2	12 28	13·0
18 ..	15·3	15·2	15·2	17·0	18·3	14·5	13·4	13·6	16·6	17·0	15·8	15·2	15·6	7 20	18·5	11 16	13·0
19 ..	15·0	14·8	15·3	17·0	18·4	14·6	11·8	12·7	15·4	15·5	14·8	14·8	15·1	7 52	18·5	11 50	11·7
20 ..	15·1	15·2	15·7	16·6	17·8	13·8	12·4	12·9	14·8	15·8	14·5	14·6	15·0	7 16	17·9	12 0	12·3
21 ..	15·1	15·7	15·9	16·7	18·9	15·6	12·9	11·9	14·0	14·9	14·4	14·8	15·1	7 48	19·0	14 6	11·8
22 ..	15·2	15·6	15·8	16·9	17·9	14·5	12·9	12·8	15·2	15·4	14·7	14·7	15·1	7 36	18·2	13 24	12·5
†23 ..	15·1	15·3	15·7	16·6	18·1	15·4	12·0	12·4	14·1	15·6	14·8	14·8	15·0	7 36	18·4	12 20	11·7
24 ..	15·1	15·3	15·4	16·9	18·3	14·1	10·1	11·7	14·2	15·8	14·7	15·1	14·7	7 20	18·6	11 50	10·1
†25 ..	15·5	15·3	15·6	17·0	19·4	15·5	12·4	12·7	13·8	14·8	14·8	15·0	15·2	7 36	19·4	12 16	12·2
26 ..	15·1	15·1	15·0	16·0	17·1	14·7	12·1	11·7	13·1	14·7	14·7	15·7	14·6	7 24	17·1	13 48	11·5
27 ..	15·6	15·6	15·8	17·3	18·1	14·8	12·8	13·8	15·9	15·1	15·7	15·3	15·5	7 20	18·6	11 48	12·7
28 ..	15·2	15·4	15·7	16·9	17·9	14·7	11·0	13·9	16·2	15·7	14·9	15·1	15·2	7 16	18·1	11 36	10·9
†29 ..	15·0	15·3	15·5	17·0	19·1	15·4	12·9	13·7	16·2	15·6	14·7	14·8	15·4	7 36	19·3	11 58	12·8
30 ..	14·8	15·1	15·4	16·3	16·9	13·5	11·2	12·9	16·0	15·6	14·4	14·8	14·8	6 56	16·9	11 34	11·1
31 ..	15·0	15·3	15·8	16·9	18·9	15·2	12·9	15·0	16·6	15·7	15·2	15·0	15·6	7 24	19·0	11 40	12·7
Mean ..	15·3	15·6	15·8	17·0	18·1	15·1	12·8	13·3	15·2	15·7	15·0	15·1	15·3				
†Mean..	15·3	15·5	15·7	16·8	18·4	15·5	12·8	13·5	15·1	15·6	14·9	15·0	15·4				

* See foot-note on page 48. † Five international quiet days.

Bi-hourly values of declination (easterly), 1921.

0° *plus* tabular quantities.

September.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Daily mean.*	Maximum. Time. H. M.	Maximum. Mag.	Minimum. Time. H. M.	Minimum. Mag.
	′	′	′	′	′	′	′	′	′	′	′	′	′		′		′
1 ..	15·1	15·2	15·7	16·6	17·3	14·7	12·9	14·1	15·9	15·7	15·0	14·7	15·2	6 50	17·5	11 56	12·8
2 ..	14·8	15·1	13·4	16·6	17·9	13·4	12·0	12·8	15·2	16·4	15·3	15·9	15·1	7 4	18·1	11 46	11·8
3 ..	16·0	16·1	16·4	17·5	18·0	12·7	11·1	12·8	15·9	15·5	15·4	15·3	15·2	7 4	18·6	11 32	10·9
4 ..	§	§	§	16·2	18·1	14·3	12·9	14·1	16·7	16·6	15·5	14·9	15·5				
5 ..	15·4	15·4	15·7	16·9	18·5	14·0	11·1	12·7	15·6	15·8	15·1	15·1	15·0	7 32	18·7	12 24	10·7
6 ..	15·3	15·3	15·6	16·2	18·2	16·2	12·5	13·4	14·9	14·9	14·6	14·8	15·2	8 12	18·5	12 36	12·4
7 ..	15·1	15·2	15·4	15·8	17·4	15·4	12·7	14·1	15·7	14·8	14·9	14·7	15·1	7 40	17·5	12 8	12·6
8 ..	14·7	15·0	15·6	16·4	17·3	14·2	12·4	12·8	15·1	15·2	14·4	15·8	15·0	7 36	17·6	12 20	12·1
9 ..	15·7	15·7	15·6	16·3	17·9	15·3	12·4	12·9	14·4	15·2	14·5	14·8	15·1	7 36	18·1	12 20	12·1
10 ..	15·1	15·3	15·1	16·2	18·2	15·3	12·2	12·7	15·1	14·9	14·8	14·7	15·0	7 0	18·4	12 48	11·7
†11 ..	15·0	15·0	15·1	15·5	16·8	15·3	12·9	13·3	15·0	14·7	14·4	14·7	14·9	7 48	16·8	12 36	12·5
†12 ..	14·8	15·3	15·3	15·6	16·9	14·9	12·8	13·4	15·2	14·7	14·4	14·6	14·9	7 20	17·0	12 28	12·7
†13 ..	14·7	14·9	15·1	15·4	15·9	12·7	12·3	12·5	14·0	14·0	14·2	14·6	14·3	6 56	16·5	12 52	12·1
14 ..	14·8	15·1	14·9	14·8	16·5	13·9	12·5	12·8	15·4	14·4	14·0	14·5	14·5	7 36	16·8	12 24	11·9
15 ..	14·6	15·0	14·9	15·2	17·9	16·1	13·0	13·5	14·8	15·0	14·7	14·8	15·0	7 50	18·0	12 20	12·7
16 ..	15·0	15·0	15·1	15·4	17·2	14·4	11·8	12·9	16·0	15·0	14·6	14·6	14·8	8 4	17·5	11 56	11·7
17 ..	14·7	14·8	15·2	15·7	17·1	14·7	11·6	12·6	15·6	15·0	14·5	14·7	14·7	7 32	17·3	12 12	11·3
18 ..	14·9	15·1	15·0	15·3	17·1	15·1	11·9	12·8	14·9	14·8	14·4	14·7	14·7	7 40	17·4	12 20	11·7
19 ..	14·5	15·3	15·4	15·7	17·0	15·3	12·6	12·9	14·1	14·6	14·6	14·8	14·8	7 20	17·1	12 40	11·9
20 ..	15·0	15·1	15·1	15·7	16·4	14·3	10·9	12·1	14·6	15·0	14·7	14·7	14·4	7 20	17·0	12 24	10·6
21 ..	15·0	15·0	14·9	15·5	16·6	13·9	11·1	12·6	14·4	15·3	14·6	14·7	14·5	7 16	16·9	11 56	10·7
22 ..	15·0	15·2	14·7	15·8	17·0	14·2	11·5	12·3	14·7	14·6	14·5	14·6	14·5	7 4	17·1	12 20	11·1
23 ..	15·1	15·0	14·9	15·3	15·9	13·6	12·2	13·2	14·2	13·7	14·4	14·5	14·4	6 40	16·4	12 18	12·0
†24 ..	14·8	14·9	14·7	15·1	17·0	13·6	12·4	13·1	15·1	14·8	14·4	14·7	14·6	8 0	17·2	12 12	11·9
†25 ..	14·7	14·9	14·8	15·5	15·7	14·0	11·7	13·1	14·8	14·2	14·2	14·5	14·3	7 20	16·6	12 20	11·6
26 ..	14·4	14·9	14·6	14·7	15·1	13·5	12·1	12·8	15·0	14·6	14·3	14·4	14·2	7 16	15·7	12 30	11·6
27 ..	14·7	14·5	14 2	14·4	17·1	15·3	11·9	12·8	14·2	14·5	14·2	14·5	14·3	7 50	17·2	12 36	11·4
28 ..	14·7	14·7	14·0	14·2	16·1	15·0	12·4	13·2	14·8	14·2	14·4	14·9	14·4	7 56	16·2	12 28	11·8
29 ..	15·8	15·1	14·2	14·5	15·9	14·2	12·9	13·9	15·0	14·6	15·0	15·0	14·6	7 48	16·0	11 56	12·7
30 ..	14·9	15·1	15·1	15·4	16·5	14·6	12·8	14·0	15·2	14·2	14·6	14·9	14·8	7 46	16·7	12 16	12·6
Mean ..	15·0	15·1	15·0	15·6	17·0	14·5	12·2	13·1	15·1	14·9	14·6	14·8	14·7 ‡				
†Mean..	14·8	15·0	15·0	15·4	16·5	14·1	12·4	13·1	14·8	14·5	14·3	14·6	14·6				

October.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	Daily mean.*	Maximum. Time. H. M.	Maximum. Mag.	Minimum. Time. H. M.	Minimum. Mag.
	′	′	′	′	′	′	′	′	′	′	′	′	′		′		′
1 ..	15·3	15·1	14·5	15·6	16·4	13·7	11·8	14·0	15·2	14·2	14·8	14·9	14·6	7 36	16·8	11 52	11·5
2 ..	13·2	13·3	15·0	15·5	16·5	15·0	13·5	14·0	14·6	14·5	14·5	14·6	14·8	7 38	16·7	12 24	12·7
†3 ..	14·9	14·9	15·1	15·0	15·8	13·9	12·5	13·9	14·7	14·6	14·6	14·3	14·6	7 8	16·1	12 16	12·4
4 ..	14·6	14·8	14·5	14·4	16·1	14·7	13·4	14·1	15·2	14·7	14·4	14·5	14·7	7 50	16·2	11 50	13·4
5 ..	14·8	15·0	14·9	14·4	16·2	16·1	13·6	12·9	13·9	14·2	14·3	14·7	14·6	8 32	16·7	13 24	12·6
6 ..	15·5	15·4	14·9	15·1	15·4	14·3	12·6	13·3	14·8	14·6	14·5	14·5	14·6	0 4	15·8	12 20	12·4
7 ..	14·9	15·0	14·7	15·1	16·4	13·3	12·4	14·2	14·8	14·9	14·8	14·6	14·6	7 40	16·8	11 16	11·9
8 ..	14·9	15·0	15·0	14·3	15·6	14·0	14·5	16·1	17·6	14·7	15·1	15·5	15·1	15 40	18·0	9 56	13·7
9 ..	16·2	15·3	14·0	15·0	15·9	14·8	14·4	14·0	14·4	14·9	15·1	15·1	14·9	0 28	16·5	3 48	13·7
10 ..	15·2	15·3	14·9	14·9	15·9	15·5	14·0	14·4	15·4	14·8	15·2	14·9	15·1	7 20	16·0	11 44	13·5
11 ..	15·2	15·2	15·2	14·9	15·8	15·2	13·3	14·8	15·3	14·3	15·5	15·7	15·2	20 36	17·1	11 36	13·1
12 ..	16·6	16·8	15·8	16·1	15·9	14·0	12·2	13·9	14·9	14·4	14·8	14·9	14·9	1 50	16·8	12 8	11·8
13 ..	15·1	15·2	15·0	15·1	16·8	15·8	14·8	15·3	15·4	14·6	14·7	14·9	15·2	7 54	16·9	18 0	14·5
14 ..	14·9	15·0	14·8	14·3	14·7	13·9	12·5	14·0	15·3	14·5	14·8	15·1	14·5	22 40	15·7	11 28	12·5
15 ..	15·4	15·4	14·8	14·6	14·7	13·7	13·0	14·7	16·0	14·8	15·6	15·0	14·8	16 0	16·1	11 56	12·9
†16 ..	15·3	15·3	15·1	15·0	14·7	13·5	12·5	14·3	15·5	14·6	14·6	14·8	14·6	15 24	15·7	11 20	12·3
†17 ..	15·1	15·0	15·0	15·0	16·5	14·3	12·3	14·2	15·9	14·7	14·8	14·9	14·8	7 44	16·5	11 20	11·8
†18 ..	15·2	15·0	14·9	14·8	15·7	14·3	12·7	13·6	15·2	14·5	14·3	14·4	14·5	7 8	15·9	12 0	12·4
†19 ..	14·8	15·0	14·8	14·7	15·4	14·0	12·4	13·8	15·3	14·7	14·6	14·7	14·5	7 58	15·6	12 0	12·2
20 ..	14·8	14·9	14·8	14·4	15·2	14·4	13·4	13·9	15·3	14·9	14·4	14·4	14·5	16 12	15·5	12 16	13·2
21 ..	14·7	14·8	14·1	14·0	15·6	15·5	13·9	14·8	15·7	14·8	15·5	15·3	14·9	8 20	16·0	11 20	13·3
22 ..	15·6	14·8	14·8	14·8	16·0	15·2	14·0	15·1	16·0	14·7	14·6	14·8	15·1	7 48	16·2	11 28	13·5
23 ..	14·9	14·8	14·3	14·6	15·5	15·5	13·6	14·4	14·7	14·2	14·7	14·7	14·7	8 20	15·9	12 0	13·3
24 ..	15·0	14·8	14·5	14·3	15·0	15·1	14·2	14·9	15·1	14·5	15·0	14·8	14·8	9 14	15·5	11 48	13·8
25 ..	15·1	14·9	14·5	14·4	15·5	15·2	14·4	15·1	15·5	14·5	14·6	14·6	14·9	8 20	15·8	3 48	14·4
26 ..	14·9	14·7	14·7	14·8	15·8	14·9	14·2	14·4	14·4	14·5	15·2	14·7	8 40	16·2	11 36	13·9
27 ..	15·2	15·2	14·7	14·3	15·1	14·7	14·1	15·5	15·3	14·7	14·3	14·4	14·8	13 32	15·6	11 20	13·5
28 ..	15·1	14·7	14·0	13·8	14·2	14·5	13·8	14·9	15·2	14·5	13·7	14·7	14·5	15 4	15·5	5 20	13·1
29 ..	14·9	14·5	14·9	13·8	14·9	14·2	13·7	14·5	14·6	15·1	14·4	14·7	14·5	17 48	15·2	11 40	13·6
30 ..	14·3	14·8	14·3	14·0	14·6	14·5	13·4	14·9	14·9	14·2	14·2	14·2	14·5	14 8	15·4	11 20	13·3
31 ..	14·4	14·5	14·5	14·1	14·3	14·1	13·3	14·5	14·8	14·5	14·4	14·8	14·4	22 44	15·6	11 0	13·1
Mean..	15·0	15·0	14·7	14·7	15·6	14·6	13·4	14·4	15·2	14·6	14·7	14·8	14·7				
†Mean..	15·1	15·0	15·0	14·9	15·6	14·0	12·5	14·0	15·3	14·6	14·6	14·6	14·6				

* See footnote on page 48.

† Five international quiet days.

‡ Mean of 29 days.

§ Curve lost owing to the stoppage of the driving clock. Daily mean for the 3rd September is not corrected for progressive change; daily mean for the 4th September is the mean of 18 hourly values.

Bi-hourly values of declination (easterly), 1921.

0° *plus* tabular quantities.

November

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	*Daily mean.	Maximum. Time.	Mag.	Minimum. Time.	Mag.
	′	′	′	′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′
1 ..	15·1	15·0	14·6	14·3	14·1	14·6	13·9	14·1	14·5	14·6	14·4	14·5	14·5	17 0	15·3	11 16	13·5
2† ..	14·6	15·0	14·6	14·5	14·9	13·2	12·8	14·0	14·4	14·3	14·3	14·3	14·2	1 40	15·3	11 8	12·4
3† ..	14·5	14·4	14·1	14·1	14·9	13·9	12·5	13·9	14·6	14·4	14·3	14·4	14·2	8 16	15·1	11 20	12·3
4† ..	14·5	14·4	14·2	13·9	14·9	13·9	12·5	14·0	14·6	14·3	14·4	14·3	14·1	8 32	15·4	11 20	12·3
5 ..	14·5	14·0	14·1	13·7	14·3	14·4	14·4	14·9	14·3	14·0	14·1	14·2	14·2	13 36	15·0	6 0	13·3
6 ..	14·1	14·5	13·2	12·8	14·0	14·1	14·7	15·3	15·1	14·7	15·5	14·8	14·3	15 8	15·7	6 12	12·2
7 ..	14·7	15·3	15·3	14·1	14·6	14·7	14·8	14·8	14·3	14·5	14·2	14·3	14·7	2 24	15·7	6 36	13·8
8 ..	15·0	14·7	14·2	13·9	14·7	14·4	14·2	14·3	14·7	14·2	14·3	14·1	14·4	0 24	15·2	11 28	13·7
9 ..	14·3	14·2	14·0	14·1	14·6	14·8	13·7	14·5	14·0	14·1	14·5	14·5	14·3	9 16	15·0	11 28	13·5
10 ..	14·9	15·1	14·0	14·1	13·9	13·7	13·5	14·0	14·4	14·1	15·0	14·6	14·2	1 24	16·4	11 32	13·3
11 ..	14·9	14·8	14·4	13·5	14·0	14·7	13·6	14·2	13·7	14·3	14·5	14·5	14·2	0 44	15·1	6 36	13·0
12 ..	14·6	14·6	13·9	13·6	13·6	13·8	13·9	14·4	14·1	14·0	14·5	14·4	14·1	0 50	14·7	6 48	13·1
13 ..	14·5	14·3	14·0	13·6	13·8	14·0	14·0	14·4	14·2	14·5	14·7	15·1	14·2	20 40	15·3	5 56	13·1
14 ..	14·5	14·0	14·1	13·8	13·9	13·9	13·2	14·0	14·0	14·5	14·3	14·4	14·1	17 48	14·9	11 0	12·8
15 ..	14·4	14·5	13·9	13·5	13·4	14·4	14·4	14·5	14·1	14·4	14·4	14·3	14·2	0 32	14·7	6 36	12·9
16 ..	14·6	15·0	14·0	12·6	14·0	15·7	14·8	15·1	16·2	16·1	14·5	14·7	14·8	18 0	16·7	6 16	12·0
17 ..	16·3	14·5	14·9	12·9	13·8	14·0	15·2	15·7	16·2	17·6	14·8	14·5	15·0	17 20	17·8	6 28	12·1
18 ..	14·6	14·2	14·8	13·9	14·2	14·2	13·3	14·8	14·8	15·2	14·4	14·4	14·5	16 28	15·4	11 40	13·0
19 ..	14·8	14·6	14·4	14·0	14·9	14·8	14·7	14·9	15·3	15·0	15·0	14·6	14·7	16 32	15·9	7 4	13·3
20 ..	14·4	14·3	14·1	14·0	13·9	14·2	14·4	14·8	14·8	14·8	14·5	14·6	14·3	12 50	17·3	6 34	13·3
21 ..	14·3	14·1	13·8	13·3	13·5	13·5	13·6	14·6	15·0	15·0	14·5	14·7	14·1	17 0	15·6	6 36	12·6
22 ..	14·2	14·4	14·1	13·5	13·3	13·0	13·2	13·3	13·9	14·4	14·3	14·0	13·9	22 56	14·9	10 44	12·9
23 ..	14·7	14·1	13·9	13·7	14·1	15·2	13·8	14·2	14·5	14·4	14·6	14·5	14·3	9 22	15·5	6 16	13·4
24 ..	13·8	14·9	14·4	13·2	13·9	14·2	14·0	13·8	14·6	14·2	14·1	14·0	14·1	1 16	15·3	5 42	12·9
25 ..	14·2	13·9	13·7	13·5	13·3	13·9	14·0	14·6	14·5	14·3	14·3	14·4	14·1	13 40	14·8	6 32	13·0
26 ..	14·2	14·1	13·6	13·4	13·6	14·3	14·6	14·4	14·5	14·1	14·2	14·1	14·0	11 20	14·7	6 24	12·8
27† ..	14·2	14·1	13·8	13·6	13·8	13·6	13·5	14·9	14·5	14·4	14·2	14·3	14·0	13 40	15·0	6 46	13·1
28 ..	14·4	14·3	13·9	13·7	13·2	13·1	13·1	14·3	13·6	13·8	13·9	13·8	13·7	0 0	14·5	11 22	12·9
29† ..	13·9	13·9	13·6	13·6	13·7	13·7	13·1	13·9	14·4	14·3	13·8	13·8	13·8	15 24	14·8	6 44	12·9
30 ..	13·7	13·7	13·4	13·1	13·9	13·0	12·8	13·5	14·2	14·2	14·0	13·9	13·6	16 0	14·6	10 40	12·7
Mean ..	14·5	14·4	14·1	13·7	14·0	14·1	13·8	14·4	14·5	14·6	14·4	14·4	14·2				
Mean†..	14·3	14·4	14·1	13·9	14·4	13·7	12·9	14·1	14·5	14·3	14·2	14·2	14·1				

December

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	*Daily mean.	Maximum. Time.	Mag.	Minimum. Time.	Mag.
	′	′	′	′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′
1 ..	13·9	13·9	13·8	13·5	13·0	12·2	11·7	13·9	14·1	14·4	14·5	14·1	13·5	17 26	14·8	10 58	11·9
2 ..	13·9	13·9	12·9	12·5	13·1	14·2	13·5	15·1	15·0	14·4	14·3	14·0	13·9	14 32	15·8	5 56	11·7
3 ..	14·1	13·8	13·5	13·1	13·8	14·2	14·2	13·8	14·2	14·6	14·2	14·2	14·0	16 20	14·9	6 16	12·1
4 ..	14·2	14·0	13·7	13·3	13·6	14·1	14·4	14·3	14·6	14·2	14·1	14·1	14·1	14 40	14·9	6 40	13·0
5 ..	14·1	13·9	13·5	13·1	13·8	14·8	11·4	14·8	14·5	14·1	14·1	14·0	13·7	13 20	15·1	6 40	13·0
6† ..	14·1	13·8	13·5	13·1	13·1	13·3	13·4	14·3	14·2	14·1	13·9	13·9	13·7	14 20	14·6	6 40	12·8
7† ..	13·8	13·9	13·5	13·3	13·5	13·6	13·0	13·9	14·0	14·2	13·9	13·9	13·7	17 36	14·4	11 16	12·7
8 ..	13·8	13·5	13·0	12·7	12·9	13·4	14·0	13·8	13·9	14·0	14·4	14·0	13·7	19 16	14·5	7 0	12·3
9 ..	14·0	13·9	12·9	12·5	12·7	12·9	13·7	13·9	13·9	14·2	13·9	14·1	13·6	13 20	14·6	7 20	12·3
10 ..	14·2	14·1	13·4	13·2	12·8	12·9	13·6	14·2	13·7	14·3	14·3	13·8	13·7	17 0	14·5	7 40	12·5
11 ..	14·0	14·0	13·4	13·2	13·4	13·9	13·9	14·3	13·5	14·2	14·2	14·0	13·9	13 20	14·6	7 0	13·1
12 ..	14·4	14·1	13·4	11·9	12·6	13·0	14·4	15·7	14·6	15·4	14·5	14·3	14·1	17 4	16·2	6 56	11·3
13 ..	14·6	14·5	13·7	12·9	12·5	12·7	13·8	15·6	15·4	16·5	14·5	14·1	14·3	14 50	17·0	7 28	11·8
14 ..	14·8	13·5	13·6	13·3	12·6	14·0	14·5	15·7	14·4	14·5	14·1	14·0	14·0	13 32	15·8	6 48	12·3
15 ..	14·0	14·1	14·0	13·1	12·7	13·9	14·6	15·7	14·9	14·0	14·4	14·0	14·1	13 40	16·0	7 36	12·4
16 ..	14·0	13·6	13·6	12·7	12·2	13·1	14·1	15·3	16·1	15·0	14·5	15·1	14·2	15 4	16·9	7 16	12·1
17 ..	14·7	14·3	13·7	13·1	12·5	13·4	13·9	14·5	15·3	14·8	14·1	13·9	14·0	16 12	16·1	7 24	12·1
18 ..	14·1	14·0	13·7	13·4	13·6	13·6	12·8	14·4	14·0	14·1	14·0	14·0	13·8	14 28	14·6	1 52	12·6
19† ..	14·1	13·9	13·9	13·5	13·5	13·7	12·8	14·0	13·9	14·0	14·0	13·8	13·8	14 40	14·5	12 8	12·6
20† ..	13·9	13·6	13·5	13·6	13·9	14·5	14·3	14·5	14·0	14·2	14·1	13·9	14·0	9 24	15·0	2 8	13·2
21† ..	13·8	13·7	13·5	13·3	13·3	14·2	13·6	13·0	13·8	14·2	14·1	13·8	13·7	17 0	14·6	7 0	12·5
22 ..	13·6	13·4	13·2	12·6	13·0	13·9	13·1	14·1	13·8	14·1	14·1	14·0	13·5	20 50	14·2	6 50	12·2
23 ..	13·9	14·0	14·0	13·2	13·0	13·1	13·0	13·3	13·4	14·0	14·0	14·0	13·6	2 22	14·5	11 20	12·3
24 ..	14·1	14·2	14·0	13·7	13·0	13·8	14·0	14·0	13·0	13·7	14·0	14·3	13·8	22 40	14·7	7 20	12·4
25 ..	14·5	14·6	13·6	13·1	13·3	14·5	14·6	14·2	14·2	14·2	14·2	14·0	14·1	0 50	14·8	6 56	12·6
26 ..	14·1	13·9	13·3	13·0	12·9	13·5	13·4	13·7	14·1	13·9	14·0	14·6	13·7	23 56	14·8	7 4	12·3
27 ..	15·1	14·4	13·1	13·2	12·4	13·4	14·2	15·6	13·5	13·9	14·2	14·3	13·9	13 50	15·6	7 20	12·2
28 ..	13·9	13·5	12·4	11·4	12·1	13·6	14·8	14·5	13·9	14·3	15·8	14·6	13·8	18 48	16·8	6 50	10·7
29 ..	15·2	14·5	13·5	12·5	12·2	13·5	14·2	15·5	16·5	15·3	14·6	14·7	14·3	15 32	16·8	7 20	11·9
30 ..	14·5	14·0	13·2	12·8	12·6	13·1	14·0	14·8	14·7	14·4	14·2	14·0	13·8	14 56	14·9	8 12	12·3
31 ..	14·2	14·1	13·5	13·1	12·3	13·7	14·7	15·7	14·6	14·3	13·9	14·0	14·0	14 4	15·9	7 20	12·0
Mean ..	14·2	14·0	13·5	13·0	13·0	13·6	13·8	14·5	14·3	14·4	14·2	14·1	13·9				
†Mean..	13·9	13·8	13·6	13·4	13·5	13·9	13·4	13·9	14·0	14·1	14·0	13·9	13·8				

* See footnote on page 48. † Five international quiet days.

Bi-hourly values of horizontal force, 1921.

36000 γ *plus* tabular quantities.

January.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	*Daily mean.	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1 ..	929	933	938	941	934	960	965	948	941	921	911	911	935	10 54	971	18 48	900
2† ..	914	921	938	938	928	939	945	950	952	939	939	935	938	14 21	964	0 3	913
3 ..	942	945	945	951	923	934	952	953	945	948	949	939	944	12 24	956	8 20	920
4 ..	946	944	948	948	937	934	941	948	937	926	899	908	933	13 12	950	19 29	892
5 ..	921	934	939	941	938	939	949	944	933	912	926	933	935	12 32	954	17 28	912
6 ..	925	937	941	943	944	950	946	931	938	937	939	936	944	10 0	952	0 8	924
7 ..	941	945	950	953	959	975	989	971	959	949	949	956	958	11 44	990	0 4	940
8† ..	954	959	952	946	950	962	971	959	941	938	945	949	952	11 28	972	17 58	937
9 ..	953	955	960	965	977	997	1005	960	936	938	925	918	957	10 56	1012	20 45	914
10 ..	934	958	950	956	958	966	986	960	950	923	934	937	953	11 45	989	18 9	919
11 ..	933	930	936	938	940	951	964	953	945	945	951	952	947	11 6	973	1 40	927
12 ..	946	949	951	962	962	955	963	962	947	936	934	937	951	11 44	967	20 16	932
13† ..	942	946	957	961	958	969	963	969	956	948	948	950	958	11 24	983	0 0	942
14† ..	951	954	957	959	950	958	975	973	958	944	946	954	957	12 8	979	17 50	944
15 ..	954	958	960	961	958	971	986	977	965	930	952	959	962	12 48	987	18 10	923
16 ..	963	955	960	959	947	962	979	970	976	964	948	944	960	11 40	983	20 57	940
17 ..	955	948	952	955	953	973	989	969	939	929	938	901	949	12 34	995	23 15	872
18 ..	932	920	924	924	931	931	944	939	942	942	940	934	934	15 12	949	1 6	899
19 ..	934	933	942	940	953	969	985	980	961	965	959	959	958	11 46	988	1 51	933
20 ..	959	972	963	962	965	974	985	973	966	949	940	943	961	11 28	986	20 12	938
21 ..	935	936	960	946	954	967	970	957	946	943	939	949	950	11 6	977	2 59	933
22† ..	946	944	950	953	957	965	964	954	955	955	953	950	954	10 12	967	1 40	941
23 ..	954	951	955	958	963	965	969	955	949	955	954	953	956	11 4	974	14 46	945
24 ..	949	955	952	963	971	981	991	964	946	932	918	928	953	10 52	995	19 28	918
25 ..	940	941	950	953	958	971	977	963	957	947	945	953	956	10 55	982	0 3	939
26 ..	959	950	944	958	958	974	991	984	964	941	930	945	958	12 3	993	18 56	916
27 ..	946	949	963	962	957	962	976	966	956	950	953	948	958	10 44	985	0 6	945
28 ..	952	952	955	957	961	976	981	967	947	943	941	933	956	11 10	988	21 36	930
29 ..	945	951	951	952	942	938	955	955	955	950	943	940	949	12 40	959	9 30	934
30 ..	941	945	949	953	956	974	991	977	960	952	949	949	958	11 42	992	0 4	940
31 ..	947	945	955	964	957	967	984	972	944	936	940	922	953	11 48	985	22 14	918
Mean ..	943	946	950	952	952	962	973	961	951	942	940	940	951				
†Mean ..	941	945	951	951	949	959	968	961	952	945	946	948	952				

February.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	*Daily mean.	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1 ..	941	949	950	957	956	959	973	971	964	951	930	933	953	12 4	976	20 26	922
2 ..	951	946	949	955	953	961	962	937	942	924	910	915	942	12 10	964	20 40	904
3 ..	946	946	945	945	944	948	959	946	946	946	949	950	947	11 46	959	1 4	941
4 ..	948	950	952	955	967	970	976	967	965	963	964	964	962	11 36	977	0 0	948
5 ..	956	943	959	958	968	986	1002	989	932	906	905	890	948	12 12	1009	20 37	884
6 ..	912	914	930	954	943	958	965	955	945	936	927	937	940	11 36	968	0 9	906
7 ..	938	942	952	955	948	952	970	972	962	948	941	944	952	13 42	977	20 38	934
8† ..	939	939	947	948	953	967	981	961	954	947	941	947	952	11 29	982	1 14	937
9† ..	949	951	954	962	968	978	993	988	969	957	954	954	965	12 40	994	0 8	948
10 ..	960	962	965	968	977	994	996	985	972	971	967	960	973	10 42	1003	20 44	949
11 ..	962	958	956	946	956	966	968	951	951	952	949	956	956	13 7	971	7 42	945
12† ..	954	954	959	960	964	983	990	981	966	962	960	960	967	11 3	994	0 14	953
13† ..	958	959	962	968	981	1012	1020	1006	981	969	955	934	976	12 4	1023	22 2	931
14 ..	951	961	942	938	940	953	955	959	957	949	941	941	947	14 22	962	6 44	932
15 ..	940	934	932	937	938	955	966	950	949	950	948	939	945	11 58	967	3 4	931
16† ..	941	945	946	949	952	967	986	977	956	957	955	952	958	11 46	986	2 44	940
17 ..	954	954	957	959	964	981	982	979	956	955	950	948	961	10 42	984	20 26	946
18 ..	948	952	957	960	967	980	985	972	964	959	961	955	963	11 38	987	23 58	936
19 ..	936	948	957	957	964	975	983	970	951	925	944	952	955	12 20	990	18 20	921
20 ..	946	958	963	968	979	984	990	981	969	962	956	957	967	11 12	995	0 0	946
21 ..	958	962	954	967	958	965	967	943	938	933	930	935	950	10 34	973	19 22	925
22 ..	940	944	946	947	957	968	987	958	948	946	943	943	952	11 22	988	0 44	939
23† ..	945	946	950	953	964	977	990	975	956	952	954	953	960	11 42	992	0 38	944
24 ..	952	954	959	964	978	1010	1022	1001	974	964	959	959	975	11 6	1024	0 4	951
25 ..	961	964	959	962	965	979	989	986	960	952	939	948	963	12 52	993	19 39	939
26 ..	949	951	953	957	965	984	1011	994	961	961	959	953	966	12 4	1013	23 6	942
27 ..	952	952	957	959	963	976	994	986	968	962	950	951	964	12 26	1002	19 12	940
28 ..	954	956	964	969	971	998	1005	983	953	948	950	948	965	12 14	1008	16 50	933
Mean ..	948	950	953	957	960	974	984	973	957	950	946	949	958				
†Mean ..	946	947	951	954	960	974	988	976	960	955	953	953	960				

* The daily mean ordinate derived from 24 hourly tabulations of the H. F. magnetograms, corrected for the progressive change by 1/48 of the difference between the initial and the terminal hour (oh to oh) are next converted into C. G. S. unit by means of the scale coefficient for 1 cm. of ordinate; and finally these converted ordinates added to the base line values corrected to the mean temperature of the day give the absolute values of the daily means of horizontal force.

† Five international quiet days.

Bi-hourly values of horizontal force, 1921.

36000 γ *plus* tabular quantities.

March.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	*Daily mean.	Maximum. Time.	Mag.	Minimum. Time.	Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1 ..	940	947	953	961	971	988	997	977	960	939	933	942	960	12 4	1005	20 50	930
2 ..	948	956	958	961	965	982	992	969	944	950	940	949	959	11 52	993	19 18	933
3 ..	949	950	955	955	969	991	997	976	967	963	950	950	964	11 9	1003	23 10	945
4 ..	952	950	954	959	965	989	1000	978	954	953	952	951	963	11 36	1001	1 12	948
5† ..	953	956	951	953	971	989	997	987	964	956	954	949	965	11 14	1000	21 46	949
6 ..	956	960	956	958	961	982	992	984	956	945	946	955	963	12 4	995	17 4	941
7 ..	957	960	962	963	978	995	1002	987	970	962	959	956	971	12 2	1004	23 58	953
8† ..	954	960	962	960	975	1000	1019	991	965	965	963	959	973	12 10	1021	0 52	952
9 ..	957	957	961	964	981	999	1015	1001	978	975	980	959	978	11 44	1016	0 2	956
10 ..	970	949	960	948	956	976	1010	976	951	952	948	944	959	12 18	1018	22 54	933
11 ..	938	945	945	951	965	991	999	991	973	967	969	966	967	10 50	1002	0 34	935
12 ..	959	963	966	955	975	1010	1018	1000	968	969	957	949	975	10 58	1023	22 28	945
13 ..	955	962	965	965	973	1003	1017	987	965	963	958	960	974	11 22	1020	0 0	955
14 ..	966	965	968	964	978	1003	1007	977	957	960	953	930	968	10 43	1015	22 34	927
15 ..	941	936	958	966	973	983	981	935	882	875	885	899	932	10 24	992	17 26	870
16 ..	883	928	932	930	942	971	955	948	932	928	923	927	936	10 12	980	0 10	871
17† ..	930	932	933	936	949	975	986	965	949	944	945	941	949	11 32	987	0 2	929
18 ..	948	948	950	952	955	976	984	974	961	955	949	949	958	10 56	993	22 20	944
19† ..	946	946	949	948	951	977	982	971	957	952	947	946	956	11 34	987	2 28	942
20† ..	948	950	951	953	969	995	1007	989	976	964	960	956	969	11 8	1008	0 2	947
21 ..	959	954	959	962	975	1008	1019	1007	981	971	953	874	968	11 12	1021	21 58	855
22 ..	908	939	945	951	961	979	946	904	868	86.	912	914	923	10 28	981	17 40	858
23 ..	902	928	939	937	949	983	992	971	953	945	945	942	950	11 34	993	0 2	901
24 ..	943	945	947	950	963	990	1004	982	967	957	950	949	962	11 18	1007	0 30	942
25 ..	956	950	943	948	953	967	976	968	944	902	927	927	944	11 58	980	17 34	895
26 ..	935	943	959	942	943	973	964	938	935	921	903	921	938	10 16	980	18 52	891
27 ..	930	935	938	942	950	984	988	969	947	926	926	929	947	10 28	998	18 55	923
28 ..	918	949	935	940	949	974	986	969	960	951	933	930	950	11 46	987	0 16	917
29 ..	941	946	943	952	950	974	979	957	922	930	930	966	948	11 56	981	15 16	919
30 ..	934	952	938	939	944	974	985	957	949	945	941	946	953	11 10	992	0 22	932
31 ..	946	948	946	953	955	967	985	979	966	953	950	950	959	11 24	988	0 2	945
Mean ..	943	949	951	952	962	985	993	973	952	945	943	941	957				
†Mean..	946	949	949	950	963	987	998	981	962	956	954	950	962				

April.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	*Daily mean.	Maximum. Time.	Mag.	Minimum. Time.	Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1 ..	952	952	956	957	969	991	1004	987	966	957	953	951	967	11 28	1005	20 56	959
2 ..	955	957	956	958	972	1002	1001	983	963	959	955	955	968	10 44	1009	4 30	952
3 ..	956	958	964	965	974	989	995	985	998	984	945	950	972	14 38	1001	20 13	931
4† ..	949	952	962	953	961	986	995	981	968	962	957	956	964	10 40	998	2 41	941
5† ..	958	958	958	959	963	987	1008	984	969	969	965	965	971	11 36	1010	2 42	956
6 ..	964	958	952	961	975	997	1022	1003	978	965	963	952	974	11 42	1024	22 56	948
7† ..	950	952	957	962	980	1002	1001	993	978	972	963	964	974	10 20	1006	0 2	949
8 ..	965	969	971	972	994	1010	1019	992	975	940	920	939	971	10 56	1026	19 56	919
9 ..	943	943	956	959	975	1003	1007	999	974	946	938	934	964	11 2	1012	22 26	925
10 ..	942	944	948	951	952	961	970	955	950	946	941	945	950	12 8	971	23 22	927
11 ..	951	937	942	942	957	981	998	984	970	958	963	959	964	12 18	1000	1 26	935
12 ..	967	967	966	972	995	1003	1027	1004	987	981	1002	970	983	12 8	1029	22 58	951
13 ..	955	963	967	970	984	975	981	940	897	897	905	921	943	9 14	995	16 26	883
14 ..	920	940	937	947	974	977	968	958	928	909	919	935	943	9 48	978	18 46	903
15 ..	935	926	928	928	940	968	981	965	946	931	910	928	942	12 26	987	19 58	906
16 ..	938	931	935	937	949	961	952	955	944	913	904	903	933	9 28	966	18 58	893
17 ..	906	923	927	935	950	959	971	962	959	950	946	945	946	11 57	972	0 4	905
18 ..	946	945	947	949	956	978	997	987	971	963	1011	984	969	19 28	1032	1 34	943
19 ..	962	967	972	990	1000	978	985	980	968	963	958	956	973	9 20	1027	23 44	952
20 ..	954	955	957	953	971	998	991	980	959	944	947	934	961	9 40	1003	22 40	926
21 ..	956	935	938	952	930	938	955	927	899	900	915	921	930	11 4	964	17 29	885
22 ..	928	932	939	942	928	941	955	956	939	937	936	948	941	12 58	966	7 12	925
23 ..	947	947	947	939	952	984	990	962	945	922	940	943	952	11 43	994	17 50	922
24 ..	944	949	948	947	961	995	998	988	961	939	940	946	960	10 31	1004	18 4	936
25 ..	950	949	952	953	969	1008	1009	991	967	954	949	951	967	10 45	1018	20 44	945
26† ..	956	954	953	952	962	993	1004	977	958	954	952	953	964	11 8	1005	18 58	948
27† ..	949	945	953	951	953	990	1002	983	966	967	966	961	966	11 28	1006	1 30	942
28 ..	960	961	962	958	968	980	989	985	978	970	964	963	971	12 30	991	4 40	957
29 ..	965	979	972	971	1011	990	969	921	868	838	792	946	931	7 15	1014	20 14	790
30 ..	905	921	930	930	953	964	961	937	937	928	924	935	937	11 16	968	0 0	905
Mean ..	948	949	952	954	966	983	990	973	956	944	941	947	958				
†Mean..	952	952	957	955	964	992	1002	984	968	965	961	960	968				

* See foot-note on page 54. † Five international quiet days.

Bi-hourly values of horizontal force, 1921.

36000 γ *plus* tabular quantities.

May

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	*Daily mean.	Maximum. Time.	Mag.	Minimum. Time.	Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1 ..	933	935	939	939	955	972	975	961	943	926	932	938	946	11 38	976	18 50	922
2 ..	944	944	946	948	971	1001	1007	981	967	951	948	948	963	11 12	1013	0 16	943
3 ..	949	949	958	964	979	1008	1012	998	979	980	959	967	974	10 40	1017	0 11	947
4 ..	947	939	932	939	932	926	951	938	944	931	920	925	937	1 12	972	20 2	919
5† ..	934	934	942	947	947	980	986	969	955	948	949	950	955	10 58	990	0 58	933
6† ..	953	952	952	951	943	963	968	967	965	959	960	956	957	10 50	969	7 28	938
7† ..	960	954	950	951	961	1000	1015	994	977	959	956	961	970	11 40	1017	4 20	948
8 ..	963	967	973	987	997	1025	990	954	944	935	931	934	965	10 20	1028	19 34	929
9 ..	950	947	948	964	973	1016	998	974	950	947	945	932	961	9 51	1016	23 40	926
10 ..	930	940	952	953	975	995	987	981	959	953	958	952	962	10 29	999	0 0	930
11 ..	956	955	960	964	974	991	1003	994	985	967	965	970	975	12 31	1007	1 38	953
12 ..	964	964	966	968	981	983	1011	990	916	894	872	882	945	13 8	1053	18 40	869
13 ..	903	905	916	928	941	970	978	973	962	965	1025	961	954	18 3	1090	0 2	899
14 ..	956	852	853	839	848	883	881	855	881	900	864	927	872	2 27	998	2 6	799
15 ..	877	867	999	808	623	<402	465	517	653	682	728	761	696	3 30	1083	8 16	<402
16 ..	788	787	810	832	878	835	667	593	629	673	729	783	756	7 7	958	14 13	564
17 ..	797	804	804	802	868	873	877	888	881	863	854	866	852	13 44	890	0 8	785
18 ..	863	865	875	875	885	912	919	895	871	858	870	880	883	12 4	920	16 58	854
19 ..	886	882	890	899	925	945	940	923	908	895	892	896	908	10 23	947	0 26	878
20 ..	901	898	916	874	867	903	881	885	878	877	939	968	897	21 34	985	8 5	854
21 ..	922	886	893	901	919	922	902	913	911	881	895	887	903	10 22	927	19 5	876
22 ..	910	911	897	898	918	948	952	929	924	903	913	915	918	10 34	956	3 36	894
23 ..	915	928	921	907	927	937	935	916	893	900	902	904	915	10 42	940	15 56	892
24 ..	906	906	907	914	930	945	948	936	919	908	917	924	922	12 3	949	2 12	904
25† ..	929	928	932	927	947	952	959	957	939	924	924	926	936	12 12	963	19 32	920
26 ..	928	925	926	931	950	958	967	960	938	944	940	938	943	11 10	970	1 44	925
27 ..	940	938	932	929	942	961	961	954	929	927	934	941	941	11 7	972	17 8	923
28 ..	938	940	932	940	953	963	967	945	932	928	925	925	940	8 54	973	17 23	921
29 ..	927	930	932	935	936	966	965	947	929	919	932	930	939	10 51	971	17 19	913
30† ..	934	933	932	937	950	974	977	953	940	925	922	926	942	10 37	983	20 39	920
31	933	923	934	936	950	973	979	955	939	935	925	933	944	11 16	984	19 58	924
Mean ..	925	925	926	927	941	962	962	949	935	925	927	930	936				
†Mean ..	942	940	942	943	950	974	981	968	955	943	942	944	952				

June

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	*Daily mean.	Maximum. Time.	Mag.	Minimum. Time.	Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1 ..	936	937	939	941	958	970	975	975	946	948	942	946	953	13 16	982	1 40	935
2 ..	957	954	962	965	978	994	987	978	964	938	932	935	962	10 18	996	19 16	932
3 ..	941	942	942	943	956	971	977	963	959	965	957	955	956	11 6	979	0 2	940
4 ..	955	967	976	956	951	960	971	935	901	901	902	907	938	11 12	979	18 50	898
5† ..	918	930	925	926	933	951	951	941	931	924	924	925	932	12 4	954	0 30	913
6 ..	927	928	925	932	945	968	987	975	954	938	892	889	938	12 21	991	21 26	878
7 ..	933	911	921	925	941	948	946	952	934	924	917	924	932	10 36	960	0 50	908
8 ..	928	924	922	930	944	962	972	968	954	945	933	940	944	13 2	977	0 45	919
9 ..	938	968	926	927	935	952	961	959	941	931	942	936	944	0 58	976	3 17	904
10 ..	940	931	929	935	940	949	963	967	941	925	922	927	937	12 24	974	19 26	919
11 ..	924	934	931	931	940	957	956	944	944	929	929	935	939	12 24	960	0 0	924
12 ..	936	937	939	939	952	961	962	949	939	939	931	924	942	10 29	966	21 52	923
13 ..	930	935	935	939	954	986	985	966	952	943	940	947	952	10 48	991	0 2	929
14 ..	947	949	954	972	967	986	982	967	939	944	939	926	955	11 6	993	21 6	917
15† ..	937	934	930	944	947	954	970	965	946	935	943	938	945	12 44	974	3 48	929
16 ..	938	940	942	941	953	980	980	959	926	938	941	940	948	10 47	985	15 57	925
17 ..	945	946	945	953	952	957	949	924	922	920	914	926	939	7 34	963	19 8	910
18† ..	929	936	937	938	950	975	973	961	945	944	941	941	948	11 4	976	0 2	928
19† ..	941	944	951	954	972	985	1001	987	968	963	961	961	967	11 58	1002	0 20	940
20 ..	959	958	963	965	987	996	1006	988	967	948	955	953	971	11 36	1007	17 56	947
21 ..	947	945	947	939	946	964	977	982	956	943	946	946	953	12 52	984	5 51	939
22 ..	945	952	973	962	954	953	962	979	955	937	940	943	954	13 25	979	18 50	936
23 ..	945	945	946	950	968	994	1003	999	970	976	961	969	13 4	1009	0 58	942
24 ..	956	950	950	949	960	969	981	978	964	946	944	945	957	12 41	982	18 37	940
25† ..	947	949	947	953	969	979	978	973	956	956	958	959	960	9 42	979	4 4	945
26 ..	960	963	966	974	983	978	980	972	958	943	935	930	960	8 14	984	21 30	926
27 ..	924	936	943	949	965	990	1014	990	968	948	940	945	960	11 34	1015	0 0	924
28 ..	949	948	948	953	969	981	992	983	955	947	945	946	959	12 26	993	22 58	942
29 ..	945	949	949	953	959	966	1000	987	968	951	948	957	961	11 48	1000	0 20	940
30 ..	952	956	951	953	959	976	985	980	955	952	957	954	961	10 48	989	16 48	947
Mean ..	941	943	944	946	957	970	978	968	949	941	938	939	951				
†Mean ..	934	939	938	943	954	969	975	965	949	944	945	945	950				

* See footnote on page 54. † Five international quiet days.

May 12 to 16 are excluded in deriving the hourly and monthly means, the days being highly disturbed.

Bi-hourly values of horizontal force, 1921.

36000 γ *plus* tabular quantities.

July.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	*Daily mean.	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H M.	γ
1 ..	953	955	955	956	976	1004	1007	990	963	952	954	950	968	9 46	1014	23 58	946
2† ..	946	949	948	954	967	977	986	984	963	952	953	957	962	11 8	989	0 2	945
3 ..	953	954	956	963	987	1000	1003	992	963	958	943	943	968	12 44	1008	22 8	941
4 ..	945	952	959	957	971	989	1005	982	954	945	947	945	962	11 25	1007	21 28	943
5 ..	944	954	952	952	965	979	999	989	970	952	952	953	964	11 44	999	0 32	943
6 ..	954	954	955	952	979	999	1005	995	966	953	964	961	970	12 8	1012	4 44	951
7 ..	965	964	978	956	991	1005	1018	997	982	931	932	944	971	8 46	1027	19 28	926
8 ..	941	943	945	948	963	995	987	972	939	936	935	935	953	10 29	1002	18 44	919
9 ..	941	948	944	942	958	973	976	981	966	947	928	930	954	10 58	995	20 8	922
10 ..	954	937	952	954	946	965	973	965	949	942	941	939	950	12 8	975	1 15	933
11† ..	940	941	941	941	963	983	992	981	956	939	943	948	956	11 17	992	17 49	939
12 ..	950	947	949	951	962	966	976	961	949	937	938	934	951	11 29	978	18 58	934
13 ..	941	946	947	951	961	989	985	974	945	933	935	918	951	11 20	1001	22 8	917
14 ..	924	935	948	939	935	963	972	964	941	937	941	937	945	11 50	973	0 0	924
15 ..	941	944	933	936	950	944	958	968	949	946	949	947	948	14 2	971	3 58	932
16 ..	947	945	955	959	933	948	954	951	944	933	935	934	943	4 10	962	20 19	927
17 ..	936	927	932	932	947	964	981	980	963	952	955	957	953	12 54	985	1 49	927
18† ..	950	936	945	944	961	982	986	970	945	932	936	940	952	12 34	990	17 40	922
19 ..	941	940	943	948	952	982	992	984	968	956	937	951	958	12 8	995	19 34	935
20 ..	948	953	972	952	963	981	992	980	966	947	944	948	963	12 38	1001	20 50	941
21† ..	944	947	943	947	962	990	1001	983	966	957	956	959	963	11 28	1005	3 39	942
22 ..	956	956	959	953	972	1007	1013	985	952	935	936	937	963	11 28	1018	17 50	935
23 ..	949	949	950	955	961	979	984	960	947	935	935	944	954	11 24	988	20 42	932
24 ..	951	953	954	951	969	993	1014	995	959	941	944	944	964	12 24	1017	18 7	933
25† ..	943	942	948	953	969	981	988	976	963	953	959	957	953	11 16	991	1 40	944
26 ..	958	962	958	959	973	994	993	991	974	965	963	959	981	10 40	997	1 20	954
27 ..	950	975	965	966	985	1001	1005	993	978	968	969	963	977	12 49	1010	0 0	950
28 ..	958	961	962	956	962	980	986	974	963	958	960	955	964	11 54	990	23 56	936
29 ..	936	939	940	950	974	998	990	966	952	934	934	946	956	10 26	1008	18 12	930
30 ..	940	942	952	956	965	983	999	974	969	957	958	953	963	12 10	1001	0 26	938
31 ..	967	947	954	955	973	1001	1004	982	960	946	952	953	966	10 58	1008	18 12	945
Mean ..	947	948	951	951	964	984	991	979	959	946	946	946	960				
†Mean ..	945	943	945	948	964	983	991	978	959	947	949	952	957				

* See footnote on page 54.

August.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	*Daily mean.	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1† ..	949	946	949	953	971	990	986	968	959	954	960	960	962	10 36	992	2 9	944
2 ..	957	953	953	954	970	990	989	981	974	966	962	972	969	12 22	994	4 58	951
3 ..	964	952	946	958	964	992	969	889	876	900	912	916	935	10 52	1005	15 52	875
4 ..	922	922	922	927	944	971	969	960	943	926	929	931	941	10 56	981	0 36	920
5 ..	933	938	936	951	945	946	951	932	922	925	929	928	935	12 4	953	14 30	916
6 ..	935	931	933	940	947	962	953	965	945	929	941	936	943	13 8	973	0 52	928
7 ..	940	940	940	936	961	981	984	953	939	930	934	937	948	11 10	989	18 50	921
8 ..	939	945	943	943	951	964	966	964	947	943	935	945	948	12 32	971	20 4	933
9† ..	949	950	949	950	959	976	977	965	936	940	940	941	953	10 52	979	16 9	933
10 ..	940	943	943	948	947	965	986	980	966	949	949	951	957	12 2	987	1 2	938
11 ..	957	960	962	971	970	986	1001	1009	969	950	928	924	965	13 51	1010	22 8	921
12 ..	948	945	952	958	953	964	973	968	953	953	950	948	955	13 7	975	4 48	938
13 ..	950	950	950	954	964	981	984	976	967	954	946	949	961	10 46	988	19 36	944
14 ..	958	951	957	959	966	986	994	984	959	948	952	961	965	11 6	997	17 36	948
15 ..	964	956	956	961	965	983	986	991	954	945	960	940	962	13 36	997	23 53	926
16 ..	926	948	933	953	953	970	980	980	945	932	932	924	949	13 2	989	22 17	917
17 ..	957	939	942	941	954	972	974	962	938	934	927	920	947	11 44	974	21 18	918
18 ..	939	939	950	951	966	980	975	954	928	912	920	933	945	10 4	981	17 40	912
19 ..	939	941	945	954	965	977	959	953	955	955	957	954	951	11 51	977	0 0	939
20 ..	961	966	962	968	980	1004	998	982	960	958	958	960	972	11 8	1008	19 10	955
21 ..	962	958	951	959	979	986	994	986	975	964	948	952	967	11 34	997	19 58	945
22 ..	961	957	960	963	976	992	994	990	979	966	964	961	972	11 34	995	0 47	955
23† ..	961	959	958	960	959	987	1010	1002	973	963	963	961	971	12 8	1011	4 44	957
24 ..	963	963	965	966	972	996	1012	1000	977	971	965	958	976	11 58	1013	23 38	953
25† ..	954	958	956	965	963	985	989	980	967	966	961	963	967	10 44	992	0 30	952
26 ..	965	966	971	967	987	997	992	998	979	953	947	932	972	10 31	1021	21 15	923
27 ..	952	950	948	954	969	989	977	962	947	955	941	937	955	10 36	993	21 58	933
28 ..	943	946	952	955	970	990	991	978	964	961	958	953	964	10 48	995	1 6	942
29† ..	956	959	962	961	954	980	993	982	971	961	961	961	967	11 18	995	7 18	952
30 ..	962	963	967	966	976	997	1023	1021	985	952	948	937	960	13 24	1027	19 27	933
31 ..	944	942	937	940	949	937	957	940	930	930	929	941	950	2 48	956	8 6	916
Mean ..	950	950	950	954	962	979	984	973	954	947	945	945	958				
†Mean ..	954	954	955	9	961	984	991	979	961	957	957	957	964				

† Five international quiet days.

Bi-hourly values of horizontal force, 1921.

36000 γ *plus* tabular quantities.

September.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	*Daily mean.	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1 ..	939	942	945	948	951	958	968	964	954	949	946	948	952	12 16	972	1 3	938
2 ..	954	952	946	944	937	937	900	859	883	884	901	887	912	0 2	955	14 31	818
3 ..	888	906	906	917	928	950	942	932	923	923	919	923	923	10 28	951	0 0	888
4 ..	‡	†	‡	938	934	957	962	942	926	923	925	934	937				
5 ..	929	931	940	934	911	927	944	942	924	928	920	931	931	12 16	946	8 58	910
6 ..	933	940	944	946	940	959	959	949	941	930	920	930	941	10 44	967	19 50	929
7 ..	934	946	942	943	960	985	991	974	952	945	942	934	954	10 56	992	21 28	931
8 ..	947	953	956	962	959	972	980	965	955	953	942	912	956	11 2	987	21 50	911
9 ..	931	939	938	935	942	975	974	966	960	953	946	946	951	10 39	982	0 0	931
10 ..	946	947	952	952	961	984	987	964	950	949	949	948	958	10 35	991	0 17	944
†11 ..	953	950	954	955	951	962	975	972	958	958	956	954	958	12 43	978	4 54	947
†12 ..	957	956	958	961	971	1002	996	988	974	969	963	960	971	10 26	1005	1 20	954
†13 ..	961	960	968	969	978	1002	997	983	973	965	962	960	974	10 36	1003	21 2	957
14 ..	964	965	969	966	966	990	1001	1004	985	974	974	962	977	13 20	1009	21 50	961
15 ..	970	973	976	974	961	972	979	970	948	938	942	948	962	11 32	980	17 20	938
16 ..	950	955	953	955	956	977	987	982	969	963	958	961	965	11 54	988	0 2	949
17 ..	964	969	960	954	966	979	998	991	968	958	955	955	967	12 20	999	22 38	950
18 ..	954	956	955	958	958	985	992	985	972	970	961	946	966	12 8	993	21 38	946
19 ..	959	955	952	960	957	972	974	978	967	956	948	944	959	12 40	980	22 16	942
20 ..	944	950	953	955	953	979	1000	984	967	958	957	954	964	12 16	1003	0 12	943
21 ..	957	963	963	959	944	956	976	968	959	943	940	944	955	12 22	978	20 10	939
22 ..	943	950	954	950	939	960	977	969	958	959	957	959	957	12 16	978	7 40	938
23 ..	958	964	966	959	955	953	966	961	950	941	931	941	953	12 20	971	19 20	927
†24 ..	948	947	949	951	967	994	1003	988	965	954	952	950	964	11 22	1003	2 10	946
†25 ..	954	954	954	957	971	1008	1011	998	987	971	966	963	975	10 40	1012	0 58	950
26 ..	963	962	963	964	992	1009	1012	995	979	969	965	961	978	11 2	1017	22 20	960
27 ..	967	969	972	978	976	999	1003	988	977	974	965	959	977	11 2	1007	21 48	958
28 ..	959	971	987	983	975	1002	1013	989	983	980	961	940	978	11 25	1015	23 58	913
29 ..	914	953	983	944	949	932	944	936	929	931	930	940	943	3 57	993	0 8	905
30 ..	963	942	940	940	948	965	968	966	953	941	946	949	951	10 47	971	5 44	939
Mean ..	948	952	955	954	955	973	979	968	956	950	947	945	958§				
†Mean ..	955	953	957	959	968	994	996	986	971	963	960	957	968				

October.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	*Daily mean.	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1 ..	947	948	964	947	941	973	965	958	943	949	941	950	951	10 7	974	16 52	929
2 ..	949	948	950	952	966	982	988	969	961	955	951	954	960	11 7	993	0 22	946
†3 ..	957	959	951	957	966	979	986	973	962	957	955	958	963	11 41	988	4 20	949
4 ..	960	958	960	968	968	984	989	971	967	961	952	953	966	11 12	995	20 32	944
5 ..	954	969	965	966	965	963	982	985	975	965	961	951	967	13 5	990	22 21	944
6 ..	949	957	958	941	953	967	982	970	957	939	948	954	958	11 22	986	0 32	933
7 ..	955	965	957	952	973	1004	1000	988	977	963	962	960	971	10 26	1006	0 32	949
8 ..	943	951	944	953	946	962	968	803	797	848	878	903	904	9 19	974	15 26	749
9 ..	895	904	922	926	915	932	935	935	923	918	917	917	921	11 4	938	1 4	888
10 ..	923	933	934	946	948	958	968	966	951	936	936	941	945	10 40	971	1 2	918
11 ..	935	938	936	947	955	947	971	966	956	954	906	906	942	12 48	984	23 56	894
12 ..	895	901	910	904	914	941	938	937	930	930	930	948	925	11 10	950	0 0	895
13 ..	929	940	938	941	952	967	963	959	935	938	940	942	947	9 40	969	0 2	928
14 ..	946	946	950	953	968	987	989	961	955	958	945	932	958	11 16	993	21 15	930
15 ..	943	945	952	954	967	988	991	969	959	952	922	941	957	11 2	992	19 42	921
†16 ..	948	948	946	947	951	964	979	967	957	960	955	952	957	12 20	981	7 2	943
†17 ..	951	957	954	957	953	978	988	976	962	959	956	957	962	11 50	988	0 34	948
†18 ..	953	955	955	956	960	976	989	976	973	967	968	967	967	12 21	991	0 20	949
†19 ..	969	970	962	963	977	998	1006	983	964	958	955	955	972	11 32	1010	20 58	953
20 ..	958	959	960	965	974	995	1012	989	967	961	974	978	974	11 51	1012	1 10	957
21 ..	962	969	975	964	966	989	981	963	934	929	948	918	957	10 6	998	23 50	914
22 ..	914	943	946	946	959	981	992	970	953	948	945	941	955	11 41	992	0 2	913
23 ..	961	950	957	960	964	968	982	965	958	954	948	954	959	12 8	983	21 14	944
24 ..	954	949	958	958	969	982	996	973	951	950	950	953	961	11 48	996	16 46	942
25 ..	948	948	955	956	962	979	981	967	951	951	955	967	960	11 4	986	1 20	946
26 ..	957	959	958	966	975	994	1005	985	972	958	958	929	967	11 32	1008	22 9	924
27 ..	942	948	947	958	974	997	1005	982	959	943	956	954	965	11 22	1009	18 10	929
28 ..	947	955	967	966	968	984	979	954	952	951	956	957	961	9 47	986	14 18	943
29 ..	957	966	964	962	972	984	992	979	957	931	950	949	964	11 51	992	17 44	928
30 ..	964	954	958	964	974	986	989	972	960	963	963	962	968	11 8	992	2 2	951
31 ..	962	968	964	968	982	1001	1001	977	956	947	944	935	967	10 8	1004	23 58	933
Mean ..	946	950	952	954	961	977	982	964	951	947	946	946	956				
†Mean ..	956	958	954	956	961	979	990	975	964	960	958	958	964				

* See foot-note on page 54.
† Five international quiet days.
‡ Curve lost owing to stoppage of driving clock; daily mean for the 3rd September is not corrected for progressive change; daily mean for the 4th September is the mean of 18 hourly values.
§ Mean of 29 days.

Bi-hourly values of horizontal force, 1921.

36000 *γ plus* tabular quantities.

November.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	*Daily mean.	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1 ..	936	946	950	957	975	982	990	970	946	940	938	953	959	11 38	991	0 2	933
†2 ..	963	958	958	960	977	1006	1003	983	967	959	958	964	972	11 2	1010	4 16	955
†3 ..	964	965	967	970	988	1007	1005	981	979	972	969	965	978	10 44	1011	21 25	960
†4 ..	965	971	972	974	985	1005	1009	991	976	972	971	970	980	10 57	1014	0 10	961
5 ..	972	975	975	978	984	1006	1008	989	979	976	967	953	981	10 58	1010	21 20	949
6 ..	972	962	971	957	956	960	946	931	905	903	921	915	938	4 2	974	18 50	886
7 ..	933	938	930	936	948	964	957	952	949	946	943	953	945	10 34	970	0 47	924
8 ..	941	945	954	953	968	978	981	963	948	953	954	959	959	10 58	985	0 35	936
9 ..	961	960	962	959	962	981	985	979	961	943	947	945	962	11 3	990	18 4	941
10 ..	950	948	971	963	985	997	985	964	947	925	908	935	955	9 23	998	19 29	903
11 ..	947	942	944	950	969	977	976	961	953	954	953	959	958	10 58	980	1 57	939
12 ..	956	950	962	970	984	995	992	969	974	974	969	967	972	10 33	999	1 40	948
13 ..	963	967	967	971	982	996	1005	984	982	967	956	945	974	11 16	1006	21 30	939
‡4 ..	967	964	965	968	973	983	991	975	962	958	957	954	968	11 11	993	22 18	947
15 ..	963	956	967	968	985	999	1001	985	968	963	964	968	974	11 26	1003	2 12	955
16 ..	961	958	954	976	998	1011	991	963	943	932	949	942	964	9 19	1016	23 58	909
17 ..	913	936	933	928	968	987	951	954	928	863	897	936	934	9 58	989	17 46	860
18 ..	926	948	935	935	947	958	961	951	939	909	939	939	940	2 9	966	18 27	908
19 ..	950	938	939	941	948	971	956	941	933	929	934	937	944	9 44	972	16 44	922
20 ..	947	949	951	953	967	979	975	963	934	941	939	940	953	10 32	984	15 54	932
21 ..	947	949	950	958	973	988	991	972	945	925	941	927	956	10 46	998	17 25	916
22 ..	953	949	946	949	961	982	986	974	957	957	946	956	958	10 54	996	21 4	937
23 ..	943	947	952	955	971	983	985	984	964	937	931	935	956	12 43	989	23 24	924
24 ..	958	933	934	947	953	963	968	954	934	944	945	949	948	10 41	971	2 6	919
25 ..	951	953	957	960	983	986	987	973	962	951	950	946	963	10 49	989	23 4	943
26 ..	960	949	959	964	987	1000	1002	990	967	960	958	958	971	11 2	1007	1 42	949
†27 ..	961	963	963	970	980	990	994	980	962	960	958	958	970	11 11	996	20 20	954
28 ..	955	957	959	961	969	970	970	962	962	965	962	961	963	10 52	973	0 2	957
†29 ..	961	962	963	967	988	1006	1011	991	977	975	975	973	980	10 46	1016	0 2	960
30 ..	973	969	972	975	986	1004	1008	981	971	977	975	973	980	11 4	1010	23 58	965
Mean ..	954	954	956	959	973	987	986	970	956	948	949	951	962				
†Mean ..	963	964	965	968	984	1003	1004	985	972	968	966	966	976				

December.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	*Daily mean.	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1 ..	968	973	971	979	995	1017	1020	990	973	949	944	961	978	11 17	1025	19 28	940
2 ..	963	969	976	983	982	997	999	971	963	958	961	962	972	10 36	1003	18 44	950
3 ..	959	960	954	954	961	976	960	958	953	948	950	951	957	9 40	976	18 38	941
4 ..	953	954	959	964	974	989	990	977	960	955	954	951	966	10 36	991	20 25	945
5 ..	954	960	961	966	978	983	982	967	968	967	962	960	968	10 58	988	0 0	954
†6 ..	965	966	969	972	982	989	987	985	971	971	967	967	974	10 26	993	0 22	963
†7 ..	965	971	972	973	984	996	1003	986	972	967	971	971	978	11 4	1006	0 2	964
8 ..	968	973	979	986	995	994	991	975	958	949	939	953	972	10 40	998	20 12	935
9 ..	962	955	966	975	991	1000	994	982	977	975	968	960	975	10 20	1001	20 48	930
10 ..	962	962	966	973	980	983	984	979	969	968	966	968	972	10 48	988	20 33	957
11 ..	967	963	968	969	972	978	983	978	975	970	968	968	972	12 12	984	2 42	957
12 ..	982	961	976	988	991	973	950	916	931	909	925	941	952	7 9	1003	17 30	898
13 ..	941	940	945	951	966	997	981	947	913	905	926	944	945	10 20	1004	16 49	896
‡4 ..	923	958	940	938	955	960	961	939	942	946	951	950	947	11 10	965	0 0	923
15 ..	951	951	950	953	974	987	984	967	954	955	946	957	962	10 42	992	20 2	944
16 ..	963	966	959	965	981	982	978	953	928	903	925	903	949	10 53	990	21 25	899
17 ..	917	931	937	944	962	959	952	942	924	926	935	946	941	7 54	963	0 0	917
18 ..	954	944	946	955	961	980	980	960	948	952	951	951	956	10 38	982	0 58	941
†19 ..	947	950	952	956	969	978	978	968	953	952	953	953	959	11 2	983	0 0	947
†20 ..	955	955	958	962	969	984	989	969	966	957	959	960	966	11 12	992	0 2	953
†21 ..	960	961	963	967	975	971	978	974	975	962	961	958	968	12 16	1979	21 36	957
22 ..	964	965	966	974	987	996	993	982	975	963	963	949	975	10 58	001	22 3	947
23 ..	965	968	958	950	931	941	953	957	960	950	949	946	952	1 18	969	7 52	930
24 ..	948	944	948	948	960	965	960	950	956	955	948	926	952	8 47	971	22 14	922
25 ..	938	933	945	955	969	979	978	970	963	958	959	958	960	10 58	983	1 8	931
26 ..	961	959	961	966	983	983	980	970	961	952	951	932	962	10 41	986	22 47	929
27 ..	939	941	958	959	981	991	994	975	970	969	965	973	969	10 14	998	0 41	934
28 ..	973	969	982	1002	988	957	936	943	966	930	886	927	955	5 2	013	19 52	883
29 ..	923	927	955	961	966	983	983	956	929	928	946	931	948	11 5	988	17 12	901
30 ..	932	949	947	949	968	975	981	969	957	955	956	953	958	10 56	984	0 2	929
31 ..	948	954	963	958	975	982	988	979	957	957	953	958	966	11 32	990	0 12	945
Mean ..	954	956	960	964	974	981	980	966	957	950	950	951	962				
†Mean ..	958	961	963	966	976	984	987	976	967	962	962	962	969				

* See foot-note on page 54.

† Five international quiet days.

Bi-hourly values of vertical force, 1921.

17000 *γ plus* tabular quantities.

January.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	*Daily mean.	Maximum. Time.	Mag.	Minimum. Time.	Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M	γ	H. M.	γ
1 ..	182	184	187	195	197	178	178	203	209	197	199	192	191	15 12	209	11 12	173
†2 ..	193	195	196	202	202	175	183	205	210	204	199	195	197	15 6	211	9 48	174
3 ..	195	194	192	199	201	168	172	192	197	192	189	187	190	6 56	210	9 40	167
4 ..	189	189	190	195	207	165	169	180	192	193	189	189	187	7 30	207	10 16	164
5 ..	187	187	189	192	201	182	179	183	192	193	188	191	189	7 51	201	10 42	177
6 ..	192	192	193	194	203	175	183	188	188	193	191	190	190	7 44	204	10 4	173
7 ..	188	188	189	189	196	182	184	196	196	188	187	188	189	14 28	198	10 56	178
†8 ..	190	188	188	190	198	183	190	204	191	195	198	198	193	13 36	204	10 20	179
9 ..	196	195	195	197	210	200	204	218	207	197	200	200	201	13 51	218	1 20	194
10 ..	198	200	195	197	200	192	204	206	192	200	196	197	198	12 30	211	8 36	190
11 ..	196	192	192	190	200	176	200	194	194	187	190	192	192	12 40	202	9 58	175
12 ..	190	189	186	185	190	187	186	192	187	186	187	188	188	12 44	195	16 56	172
†13 ..	189	189	190	194	198	180	196	201	204	197	203	201	200	14 40	208	9 40	179
†14 ..	202	202	203	205	202	172	172	201	202	190	194	193	191	6 40	209	10 40	161
15 ..	194	193	193	195	201	177	183	201	199	188	193	191	192	13 36	202	10 28	174
16 ..	188	188	188	187	187	170	178	187	191	185	186	188	186	6 40	193	10 36	169
17 ..	185	184	185	184	188	169	180	192	195	187	190	192	186	14 22	198	9 40	169
18 ..	186	184	184	89	190	196	190	198	190	192	188	186	190	13 14	198	1 28	175
19 ..	184	183	183	183	185	168	185	189	187	183	183	181	183	14 38	193	9 44	167
20 ..	179	178	180	181	180	159	157	169	170	170	171	170	172	8 20	182	10 20	154
21 ..	170	170	170	172	176	157	179	189	188	189	195	197	180	21 46	197	9 56	156
†22 ..	196	199	202	207	212	207	210	225	220	221	219	220	213	13 52	226	0 0	183
23 ..	218	218	217	220	230	220	219	232	216	218	222	219	221	13 24	232	16 32	211
24 ..	218	215	214	216	218	209	211	230	224	212	214	213	216	14 16	232	10 20	202
25 ..	208	207	206	207	211	188	203	216	210	195	201	198	204	13 12	216	10 18	184
26 ..	195	196	196	198	196	185	176	198	199	183	185	185	190	14 16	203	11 4	172
27 ..	188	188	188	190	194	176	182	194	197	183	188	188	188	15 0	200	10 20	170
28 ..	192	194	194	197	200	177	186	207	212	195	198	195	196	15 35	213	10 16	175
29 ..	200	198	198	201	208	187	187	203	207	198	200	199	199	7 30	210	10 32	180
30 ..	201	202	202	207	212	182	167	200	205	200	201	200	198	7 36	212	11 20	156
31 ..	202	202	202	205	215	196	186	195	205	200	201	200	201	7 30	215	11 24	183
Mean ..	193	193	193	196	200	182	186	200	199	194	195	194	194				
†Mean ..	194	195	196	200	202	183	190	207	205	201	203	201	199				

February.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	*Daily mean.	Maximum. Time.	Mag.	Minimum. Time.	Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1 ..	196	198	199	200	203	186	179	195	202	194	194	193	195	15 40	204	11 28	175
2 ..	193	197	196	197	205	192	177	195	203	195	201	199	196	7 36	205	11 20	176
3 ..	202	202	201	201	201	192	199	198	202	194	195	195	198	7 56	203	9 52	190
4 ..	196	195	196	196	199	196	195	200	196	194	195	195	196	13 56	201	17 18	190
5 ..	201	199	197	201	193	188	187	209	213	209	209	209	201	15 8	213	11 16	178
6 ..	214	212	212	218	210	203	209	222	222	214	220	217	214	13 30	222	9 36	201
7 ..	218	218	216	218	221	208	209	227	228	214	215	215	218	14 16	234	10 22	203
†8 ..	220	218	218	220	218	209	205	215	214	214	215	216	215	5 8	228	12 8	200
†9 ..	215	215	215	217	222	212	206	225	225	220	219	217	217	13 51	225	11 0	201
10 ..	219	218	216	216	220	206	206	216	216	210	210	209	213	7 28	221	10 38	197
11 ..	212	209	210	211	218	207	193	196	201	201	200	199	204	8 4	219	11 8	190
†12 ..	201	199	197	198	202	187	184	195	195	191	193	194	195	7 40	202	11 8	179
13 ..	195	195	194	193	197	182	178	188	192	190	192	192	191	7 40	198	10 56	175
14 ..	198	200	200	202	208	206	201	216	217	208	209	209	206	15 51	217	4 20	196
15 ..	211	213	213	215	220	214	197	215	220	219	217	217	215	7 52	221	11 51	197
†16 ..	215	215	212	214	218	205	201	209	211	217	215	213	212	7 0	219	10 52	198
17 ..	211	211	210	210	211	195	197	214	215	208	207	207	207	15 40	216	11 42	192
18 ..	203	203	201	202	207	207	204	215	210	209	207	206	206	13 16	215	4 6	200
19 ..	206	207	208	210	222	204	196	213	209	212	209	210	209	7 52	222	10 56	193
20 ..	210	209	207	213	209	194	193	203	214	210	210	211	207	15 24	215	11 12	192
21 ..	211	209	208	210	218	208	190	203	214	206	210	210	209	8 24	219	11 44	188
22 ..	210	207	205	207	210	190	189	207	214	204	207	207	205	15 28	214	10 28	184
†23 ..	205	204	205	207	218	202	193	207	214	209	213	210	208	8 20	220	11 32	193
24 ..	215	213	212	213	222	195	183	200	216	210	209	210	208	7 56	222	11 22	179
25 ..	213	214	213	217	230	213	203	205	221	217	214	214	215	7 56	231	11 30	201
26 ..	219	214	211	214	222	206	176	194	213	210	209	208	207	7 45	222	12 12	173
27 ..	210	209	208	209	216	205	184	197	204	208	206	206	205	7 40	216	11 40	179
28 ..	209	209	209	211	214	207	188	197	209	215	211	213	208	22 35	216	11 36	184
Mean ..	208	208	207	209	213	201	194	206	211	207	208	207	206				
†Mean ..	211	210	209	211	216	203	198	210	212	210	211	210	209				

* The daily mean ordinate derived from 24 hourly tabulations of the V. F. magnetograms, corrected for the progressive change by 1/48 of the difference between the initial and the terminal hour (0^h to 0^h) are next converted into C. G. S. unit by means of the scale coefficient for 1 cm. of ordinate ; and finally these converted ordinates added to the adopted base line values give the absolute values of the daily means of vertical force.

† Five international quiet days

Bi-hourly values of vertical force, 1921.

17000γ *plus* tabular quantities.

March.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	*Daily mean	Maximum. Time.	Mag.	Minimum. Time.	Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1 ..	218	217	216	215	217	206	200	196	202	206	199	197	207	1 44	219	13 28	192
2 ..	202	201	201	203	207	199	183	192	205	205	206	207	201	18 40	210	11 56	180
3 ..	214	212	212	213	218	216	204	214	224	222	222	221	216	16 40	226	11 56	203
4 ..	225	223	221	223	225	208	209	215	221	226	225	224	221	18 8	228	10 40	205
†5 ..	226	226	226	226	228	206	194	206	220	210	208	207	214	7 6	229	11 8	193
6 ..	209	209	206	207	210	191	176	191	208	200	199	201	200	7 32	210	11 52	175
7 ..	198	198	196	198	200	182	165	186	205	194	194	196	193	15 24	205	11 20	162
†8 ..	197	196	195	196	200	187	166	191	196	190	190	192	191	7 32	201	11 44	166
9 ..	191	192	191	190	197	185	171	182	192	185	189	193	188	7 52	199	11 8	165
10 ..	193	189	186	191	192	186	181	187	193	189	193	195	191	22 14	197	11 12	180
11 ..	196	195	194	194	198	199	186	194	211	210	214	219	201	22 16	220	12 4	185
12 ..	215	214	213	211	218	211	196	205	218	211	214	216	212	22 48	221	12 24	195
13 ..	215	215	215	216	222	208	204	214	223	215	215	218	215	16 20	224	12 8	202
14 ..	218	218	216	218	225	220	217	218	217	215	218	220	218	7 32	225	16 50	210
†5 ..	215	215	216	213	225	213	202	217	223	215	223	227	218	23 24	234	11 32	201
16 ..	224	224	217	219	219	210	202	206	214	213	213	213	214	0 9	225	12 0	200
†17 ..	215	216	216	215	220	209	189	200	207	205	204	206	208	7 20	220	11 56	188
18 ..	206	208	207	206	217	210	199	214	218	216	212	216	211	14 50	219	12 4	198
†19 ..	215	215	215	219	222	211	207	218	219	213	213	214	215	7 16	223	11 36	205
†20 ..	216	215	215	215	222	208	204	212	217	213	213	215	214	7 14	222	11 48	203
21 ..	216	215	213	215	217	193	187	202	207	205	210	216	208	7 4	220	11 52	187
22 ..	206	208	207	210	219	213	204	201	219	210	213	221	212	22 56	222	12 44	197
23 ..	220	215	214	215	222	211	188	192	206	205	212	214	210	7 56	223	12 40	183
24 ..	214	214	212	212	222	216	192	204	219	211	214	219	213	7 44	222	12 26	190
25 ..	220	220	217	222	222	208	201	212	226	216	220	224	217	7 22	227	10 36	195
26 ..	225	223	222	227	234	216	213	226	231	230	229	232	227	7 4	234	11 14	212
27 ..	230	230	227	228	234	232	210	209	222	223	219	227	224	7 24	236	13 4	204
28 ..	221	219	217	218	221	215	202	206	220	215	215	219	215	16 56	222	12 44	193
29 ..	220	217	215	215	227	221	197	195	210	213	207	212	212	8 10	231	13 24	190
30 ..	208	210	206	211	222	216	195	203	218	216	218	222	212	22 24	225	12 12	192
31 ..	224	224	224	224	235	203	197	204	210	206	209	211	214	7 56	236	11 4	192
Mean ..	213	213	211	212	218	207	195	204	213	210	211	213	210				
† Mean ..	214	214	213	214	218	204	192	205	212	206	206	207	208				

* *See* footnote on page 60.

April.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	*Daily mean	Maximum. Time.	Mag.	Minimum. Time.	Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1 ..	221	221	220	218	226	225	210	228	234	224	224	22.	223	14 44	236	11 30	207
2 ..	226	226	224	224	222	205	193	207	220	213	212	214	212	0 0	227	11 32	190
3 ..	217	215	213	214	214	207	193	206	205	205	210	210	209	6 40	221	11 28	192
†4 ..	213	213	212	210	215	198	189	200	206	200	200	203	205	6 48	217	11 16	189
†5 ..	203	203	203	205	205	204	197	203	205	197	201	202	202	6 34	212	10 44	197
6 ..	202	201	201	199	214	210	182	213	221	216	220	222	210	14 48	224	11 40	182
†7 ..	224	223	224	227	223	206	188	207	215	215	221	223	216	6 12	231	11 36	187
8 ..	223	223	222	224	228	209	196	215	223	221	219	221	219	7 4	232	10 44	193
9 ..	219	220	218	224	219	205	199	208	224	221	225	229	218	16 52	229	11 0	199
10 ..	230	226	227	227	231	235	208	211	229	226	228	230	226	8 28	236	12 20	201
11 ..	228	237	222	229	235	227	210	219	229	226	225	232	224	5 36	240	11 39	209
12 ..	226	224	220	221	229	205	195	212	215	212	212	219	216	7 24	229	11 42	194
13 ..	213	213	209	211	221	218	218	220	229	213	215	217	217	15 58	234	3 12	208
14 ..	215	215	214	214	210	202	207	212	210	210	212	216	212	23 46	222	10 16	201
15 ..	218	217	216	217	210	195	192	205	216	213	217	217	212	22 28	228	11 0	191
16 ..	221	220	219	223	226	228	217	230	225	223	223	227	224	13 32	231	11 51	217
17 ..	230	228	227	232	229	213	209	210	227	227	224	229	223	6 4	235	10 48	208
18 ..	228	227	227	234	227	213	209	213	225	226	226	232	223	6 4	236	11 20	209
19 ..	224	227	223	236	230	219	206	212	227	227	228	229	223	7 10	239	11 56	203
20 ..	231	230	231	239	229	214	214	224	227	217	216	216	223	6 0	240	10 36	210
21 ..	216	217	216	225	205	201	212	220	228	226	219	222	217	15 51	228	10 8	200
22 ..	223	221	222	233	228	204	195	215	226	217	218	222	218	6 44	234	11 0	191
23 ..	227	226	224	231	220	186	201	226	232	224	223	229	221	6 40	237	9 22	182
24 ..	230	226	225	232	223	202	207	207	217	219	219	226	219	5 51	232	9 40	201
25 ..	227	225	224	228	219	204	212	225	232	221	223	227	222	15 8	233	10 36	203
†26 ..	228	227	225	231	230	206	201	220	228	217	218	222	221	6 48	238	11 40	200
†27 ..	227	228	224	230	223	199	207	216	222	221	223	226	220	6 12	231	10 34	193
28 ..	230	229	228	231	223	222	218	225	238	235	233	236	229	16 4	241	9 31	211
29 ..	238	240	239	244	234	230	227	239	248	245	250	244	240	22 28	260	11 22	223
30 ..	258	253	252	254	247	233	231	240	242	233	234	238	242	0 20	259	11 12	223
Mean ..	224	223	222	226	223	211	205	216	224	220	221	224	220				
‡Mean ..	219	219	218	221	219	203	196	209	215	210	213	215	213				

† Five international quiet days.

17000 γ *plus* tabular quantities.

May.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	*Daily mean.	Maximum. Time.	Mag.	Minimum. Time.	Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1 ..	239	236	236	241	226	210	215	224	233	224	223	226	227	6 8	242	11 4	207
2 ..	224	224	224	229	219	205	211	226	236	226	223	227	222	15 40	238	9 32	202
3 ..	222	221	221	226	220	201	199	219	222	224	219	221	218	5 48	226	10 20	191
4 ..	220	220	217	224	224	179	187	201	210	209	212	214	210	6 40	232	10 12	177
†5 ..	213	212	210	220	218	181	194	207	214	207	207	210	208	6 16	224	10 8	179
†6 ..	209	207	209	217	206	184	197	227	235	233	232	237	217	15 40	237	9 32	183
†7 ..	229	229	231	240	227	189	206	223	235	238	231	235	226	6 12	243	10 0	188
8 ..	234	235	236	246	227	205	224	242	242	241	239	246	235	22 36	248	9 36	203
9 ..	243	244	243	253	235	206	218	240	247	233	240	244	237	5 51	253	9 36	202
10 ..	238	237	235	244	231	202	210	225	231	233	232	236	230	6 24	252	9 56	201
11 ..	246	248	246	253	246	227	223	231	246	246	243	247	242	5 44	254	11 52	221
12 ..	247	245	243	254	243	207	221	232	239	240	240	244	238	5 56	255	10 20	206
13 ..	250	248	246	251	256	238	224	242	247	239	239	250	243	7 32	257	11 46	220
14 ..	249	255	258	261	244	222	228	239	242	253	243	255	246	6 44	276	10 0	208
15 ..	244	251	247	229	201	260	240	275	269	249	252	260	257	6 56	330	6 54	211
16 ..	259	261	262	259	242	218	238	256	264	261	262	267	254	15 24	271	10 20	213
17 ..	268	267	264	270	265	251	250	256	260	262	258	258	261	0 46	271	10 44	246
18 ..	255	258	258	270	255	224	228	246	255	248	250	253	249	6 24	272	10 36	220
19 ..	253	250	254	259	267	223	234	248	258	252	254	257	251	7 52	268	9 42	219
20 ..	257	255	251	259	261	218	230	247	264	257	245	261	252	5 56	271	10 40	211
21 ..	256	245	245	250	232	204	208	232	239	238	237	245	236	0 10	257	10 20	198
22 ..	241	241	239	245	232	204	213	235	237	233	231	238	232	5 32	246	10 18	201
23 ..	237	234	233	238	229	213	218	239	240	232	231	235	232	14 56	243	10 44	211
24 ..	235	234	236	242	228	208	207	229	240	240	238	241	236	16 32	243	11 20	205
†25 ..	242	242	242	250	240	213	217	226	242	239	239	242	236	5 56	252	10 20	210
26 ..	241	239	238	245	237	211	212	225	235	224	235	237	231	5 48	246	9 56	210
27 ..	238	236	236	246	236	222	230	232	238	240	241	245	237	23 18	247	9 52	219
28 ..	247	245	245	253	247	226	207	238	244	238	239	243	239	6 40	255	11 52	206
29 ..	247	246	244	257	237	226	234	238	242	242	242	243	241	6 52	258	9 0	222
†30 ..	244	244	245	251	245	217	218	229	241	239	239	242	238	6 16	252	10 0	213
31 ..	242	242	241	250	235	229	238	239	250	244	242	242	241	15 20	253	9 28	222
Mean ..	239	238	238	245	236	211	216	232	240	236	235	239	234				
† Mean ..	227	227	227	236	227	197	206	222	233	231	230	233	225				

June.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	*Daily mean.	Maximum. Time.	Mag.	Minimum. Time.	Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1 ..	247	246	244	250	241	213	205	219	223	219	221	225	229	6 4	252	11 0	203
2 ..	225	227	224	232	214	210	213	213	211	214	215	218	217	5 40	232	9 34	206
3 ..	221	220	221	227	198	187	198	220	215	207	215	220	213	5 28	227	9 38	185
4 ..	222	223	226	226	214	210	206	222	228	225	226	231	221	21 56	232	9 28	201
†5 ..	231	229	230	236	226	211	205	211	221	217	222	226	223	5 40	237	10 44	201
6 ..	224	224	225	232	221	209	210	226	226	218	222	226	222	6 16	232	10 0	206
7 ..	224	225	228	236	215	188	203	226	237	235	240	245	226	22 40	249	10 36	184
8 ..	243	239	236	247	222	203	202	222	252	253	246	249	235	16 0	254	12 0	200
9 ..	250	255	244	259	246	221	226	240	244	242	242	246	243	6 12	260	9 44	220
10 ..	244	247	243	250	236	223	217	227	246	247	239	244	238	5 46	251	11 24	213
11 ..	244	243	242	250	242	221	216	226	236	240	237	241	237	6 6	253	10 44	210
12 ..	241	240	242	248	241	225	225	238	241	242	244	246	240	5 50	249	10 28	220
13 ..	247	247	245	253	239	220	219	235	244	241	238	240	239	5 40	253	11 38	217
14 ..	246	246	246	254	229	216	229	244	250	240	241	240	239	6 0	254	9 0	205
†15 ..	242	242	242	248	238	222	213	231	236	227	231	231	233	5 42	248	10 40	212
16 ..	236	236	237	242	238	212	210	225	244	236	235	235	233	15 40	246	10 20	207
17 ..	241	242	243	252	253	219	218	231	238	236	226	238	238	7 0	257	10 20	212
†18 ..	249	248	248	257	242	230	232	244	250	248	246	247	246	5 56	258	9 36	224
†19 ..	251	249	251	254	245	222	220	247	246	236	232	237	241	5 40	255	11 8	211
20 ..	241	239	237	243	231	205	202	230	230	228	228	230	228	6 12	244	11 20	194
21 ..	235	233	231	235	223	192	183	214	230	223	221	223	219	5 40	236	11 20	180
22 ..	232	229	229	235	231	217	203	216	225	231	227	229	225	6 48	238	12 0	201
23 ..	231	233	229	235	228	203	196	216	225	224	227	231	223	23 32	239	10 36	191
24 ..	239	238	238	242	231	205	219	235	240	236	233	235	232	5 56	243	10 2	201
†25 ..	244	244	243	252	248	227	219	237	241	242	242	243	240	5 50	253	11 48	219
26 ..	245	245	243	251	243	216	203	218	241	247	242	246	237	6 4	252	11 44	203
27 ..	249	247	247	254	243	214	220	233	233	236	236	240	237	5 44	255	9 56	212
28 ..	242	243	241	249	243	229	227	233	235	241	237	239	238	5 56	250	11 28	227
29 ..	240	239	241	250	243	217	212	223	240	238	239	239	235	6 24	255	10 16	209
30 ..	244	244	244	254	240	221	219	241	250	243	241	243	240	5 44	254	10 20	213
Mean ..	239	239	238	245	233	214	212	228	236	234	233	236	232				
† Mean ..	243	242	243	249	240	222	218	234	239	234	235	237	236				

* See footnote on page 60.

May 12 to 16 are excluded in deriving the hourly and monthly means, the days being highly disturbed.

† Five international quite days.

Bi-hourly values of vertical force, 1921.

17000 γ *plus* tabular quantities.

July.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	*Daily mean.	Maximum. Time. H.	M.	Mag.	Minimum. Time. H.	M.	Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ			γ			γ
1	238	239	239	244	237	212	199	212	231	235	230	233	229	6	4	247	11	20	197
†2	236	236	236	241	232	221	216	227	232	234	234	235	231	5	58	244	14	8	210
3	233	234	237	243	240	222	222	235	239	237	233	239	235	6	4	244	11	4	216
4	239	238	240	246	234	231	226	240	245	232	235	237	237	5	44	247	11	40	226
5	237	237	237	246	245	210	215	230	234	230	232	235	232	6	28	248	10	40	203
6	236	235	236	244	241	223	220	244	244	235	234	238	235	15	0	245	12	8	215
7	239	239	238	244	240	202	181	222	246	243	235	241	231	16	56	250	11	52	180
8	242	243	243	253	247	236	231	243	244	244	241	246	243	5	52	254	11	4	224
9	248	247	248	254	257	242	235	240	249	243	248	248	246	6	24	259	11	52	232
10	250	250	249	254	250	233	234	234	237	237	241	243	244	6	4	256	10	16	228
†11	245	244	245	246	244	235	233	247	240	240	240	243	242	6	20	250	10	40	230
12	244	242	242	248	247	239	230	232	231	236	236	239	239	6	12	251	11	40	229
13	242	246	244	246	236	218	220	223	227	230	228	233	232	5	32	247	11	50	212
14	237	239	235	241	240	212	212	221	230	228	228	230	229	5	52	242	11	10	211
15	233	234	237	242	234	225	219	247	229	229	230	234	230	5	40	243	13	4	213
16	239	241	238	244	242	222	209	207	226	232	232	236	231	6	48	250	13	52	205
17	237	237	239	244	238	220	222	233	235	233	226	230	233	5	36	245	9	38	220
†18	233	233	233	236	231	212	215	233	234	229	233	234	230	6	6	237	10	28	205
19	238	237	237	240	232	221	221	228	231	239	236	238	233	5	20	241	11	12	217
20	243	240	240	250	238	207	204	236	242	234	236	238	234	5	51	250	11	0	196
†21	240	240	239	243	240	217	222	224	239	242	239	243	236	6	16	248	10	20	214
22	247	247	246	252	241	220	233	246	252	248	245	246	243	5	58	253	9	50	220
23	246	245	246	253	253	217	229	235	240	237	234	238	236	6	40	258	10	4	212
24	238	238	237	240	229	195	189	228	239	238	235	238	229	6	44	245	11	10	187
†25	240	240	240	247	230	223	209	222	241	240	235	238	234	5	44	248	11	36	207
26	240	239	239	244	240	219	217	238	239	230	234	234	234	5	44	244	10	44	210
27	238	237	238	241	233	212	209	228	239	227	225	231	230	6	36	245	10	28	203
28	238	238	236	242	243	226	228	233	234	240	236	239	236	6	26	244	10	2	225
29	243	242	243	247	243	224	230	247	246	227	228	232	237	14	52	257	9	51	224
30	236	237	239	239	236	215	227	236	239	242	236	240	235	6	16	248	10	4	213
31	242	242	241	250	238	222	217	237	250	234	234	236	237	6	20	251	11	36	216
Mean	240	240	240	245	240	220	219	232	238	236	234	238	235						
†Mean	239	239	239	243	235	222	219	231	237	237	236	239	235						

* *See* footnote on page 60.

August.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	*Daily mean.	Maximum. Time. H.	M.	Mag.	Minimum. Time. H.	M.	Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ			γ			γ
†1	237	238	239	245	238	226	236	237	249	242	239	243	240	15	38	251	9	40	225
2	246	244	244	256	239	242	199	229	245	234	231	236	234	5	54	258	11	20	195
3	242	245	244	254	231	206	218	235	245	244	239	242	236	5	47	254	9	52	204
4	245	246	246	256	238	211	202	223	240	235	234	236	233	5	49	258	11	28	196
5	240	239	240	250	244	235	226	228	244	246	243	246	240	6	14	251	12	2	221
6	249	249	249	257	249	227	222	231	238	250	239	242	242	6	10	258	11	56	221
7	246	247	245	254	250	232	232	244	249	244	240	244	244	6	0	255	11	40	230
8	245	245	247	253	249	239	237	241	250	249	247	249	246	5	58	255	9	19	230
†9	250	249	249	256	251	240	223	241	248	238	239	244	244	6	26	260	11	50	223
10	247	248	248	251	245	235	229	241	240	244	241	246	243	5	40	252	12	8	228
11	246	248	247	252	243	242	219	241	254	248	248	251	242	15	56	255	10	4	210
12	251	253	252	259	249	229	241	249	256	251	247	250	249	5	52	260	9	36	229
13	252	252	252	257	255	238	242	249	253	249	249	251	250	6	4	260	9	56	235
14	252	252	252	262	244	223	231	250	257	248	247	249	247	6	8	263	10	8	220
15	252	252	251	254	246	232	240	249	252	251	246	254	248	6	20	256	10	4	228
16	250	250	249	260	239	230	242	246	257	250	244	248	247	5	40	262	9	0	224
17	249	250	250	260	248	225	226	240	251	249	245	248	245	6	16	261	11	22	218
18	249	249	249	258	251	232	249	256	257	244	246	243	249	14	32	262	9	56	231
19	242	244	247	256	241	219	228	242	251	243	243	248	242	5	46	256	9	58	217
20	250	250	252	258	250	236	236	252	251	246	244	247	248	6	28	262	9	41	233
21	253	251	251	261	251	229	236	230	250	249	249	250	246	6	28	264	10	40	224
22	254	253	252	260	255	233	236	247	254	246	248	252	250	6	48	262	10	0	229
†23	252	252	252	262	262	243	239	249	255	256	253	256	254	6	24	268	10	34	234
24	262	262	260	273	258	211	204	233	253	243	242	244	245	6	8	272	11	30	200
†25	246	244	245	256	244	214	217	232	240	243	244	246	239	6	28	257	10	40	211
26	250	249	250	258	250	218	219	235	249	244	248	250	243	6	22	259	10	36	212
27	249	249	248	259	241	228	240	252	252	242	247	247	247	5	54	260	10	4	227
28	243	249	247	254	243	208	223	253	254	234	238	240	240	14	20	257	10	36	200
†29	238	244	241	251	238	198	219	246	248	234	236	240	236	6	20	252	10	0	198
30	237	238	240	244	237	200	233	238	267	246	251	255	244	15	32	268	9	52	198
31	256	256	262	275	258	225	243	274	274	254	261	262	259	14	28	280	9	48	225
Mean	248	248	248	257	246	224	228	243	251	245	244	247	244						
†Mean	245	245	245	254	247	224	227	241	250	243	242	246	243						

† Five international quiet days.

Bi-hourly values of vertical force, 1921.

17000γ *plus* tabular quantities.

September.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	*Daily mean.	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1 ..	261	262	263	272	263	246	252	269	271	257	259	261	261	14 40	274	9 58	245
2 ..	259	258	258	268	252	234	245	256	254	258	258	262	256	6 40	269	9 46	233
3 ..	260	260	260	267	244	210	233	259	264	261	255	257	252	5 45	267	9 32	204
4 ..	254	255	257	261	240	227	243	262	267	251	251	252	251	15 24	268	8 52	217
5 ..	251	250	253	257	242	215	222	248	253	245	247	249	245	6 44	265	10 36	212
6 ..	250	249	249	252	246	212	221	239	241	236	238	240	239	6 28	256	10 32	206
7 ..	243	243	242	245	241	219	218	243	243	231	236	239	236	6 38	249	10 44	210
8 ..	242	242	244	246	246	229	232	233	245	241	238	247	241	7 12	251	10 4	224
9 ..	247	248	248	254	251	216	216	234	249	242	242	246	241	6 40	258	10 56	213
10 ..	248	249	248	257	244	217	219	244	251	246	249	250	243	6 12	258	10 8	213
†11 ..	250	248	250	254	251	224	218	242	251	242	244	248	244	6 20	259	11 0	214
†12 ..	248	250	250	252	245	227	223	243	250	240	243	245	243	6 8	256	10 24	222
†13 ..	248	247	248	249	234	228	233	246	248	245	245	245	243	6 12	252	9 16	223
14 ..	245	247	246	246	249	218	228	238	248	237	239	243	241	6 48	254	9 36	215
15 ..	244	244	244	249	249	219	212	244	253	249	253	257	244	23 44	262	11 34	209
16 ..	259	259	260	265	266	242	245	263	267	252	258	261	258	7 16	274	10 12	238
17 ..	260	261	262	263	265	234	225	256	263	255	255	258	255	6 28	271	10 40	219
18 ..	258	259	257	262	249	228	223	251	261	250	253	259	251	6 24	267	11 0	218
19 ..	262	266	264	267	254	243	235	253	263	257	260	264	257	6 4	268	11 16	232
20 ..	261	262	261	266	249	233	226	255	266	257	260	262	255	6 12	267	10 0	217
21 ..	266	264	265	270	262	233	232	255	261	257	258	261	257	6 10	272	10 56	226
22 ..	265	266	261	268	252	221	222	254	263	255	259	261	254	4 56	269	9 56	218
23 ..	264	262	262	267	262	239	236	253	258	252	260	262	257	6 24	269	11 34	234
†24 ..	261	259	260	261	258	227	241	262	265	254	257	260	256	14 40	270	9 40	226
†25 ..	261	259	259	263	240	231	225	263	263	254	253	255	252	14 56	270	11 20	219
26 ..	257	258	257	260	250	249	245	258	264	258	260	262	261	22 56	265	12 16	244
27 ..	259	259	260	265	266	242	231	251	254	257	255	258	255	6 44	276	11 44	228
28 ..	258	259	256	262	261	233	226	256	257	253	258	262	254	6 52	271	11 24	223
29 ..	265	263	259	264	267	248	248	260	266	261	265	264	260	6 8	270	9 52	245
30 ..	262	263	264	270	258	233	233	262	262	256	259	261	257	6 16	271	11 12	229
Mean ..	256	256	256	260	252	229	230	252	257	250	252	255	251				
†Mean ..	254	253	253	256	246	227	228	251	255	247	248	251	248				

October.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	*Daily mean.	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1 ..	266	265	263	273	261	241	236	270	263	255	265	263	260	6 4	274	11 4	235
2 ..	261	261	259	261	249	230	234	255	253	251	253	255	252	6 4	262	9 46	228
†3 ..	254	252	253	255	244	232	230	251	250	248	248	251	247	6 16	256	11 40	229
4 ..	252	252	249	254	250	230	230	225	244	249	241	245	245	6 24	259	11 28	223
5 ..	250	250	246	250	255	237	219	239	240	244	246	247	243	7 4	258	11 24	216
6 ..	252	251	247	254	251	241	244	255	258	253	252	253	251	16 4	263	10 0	240
7 ..	258	258	256	259	249	231	243	261	258	254	252	255	253	6 44	263	9 43	229
8 ..	255	254	256	255	256	247	258	262	259	256	262	261	257	13 42	265	8 36	242
9 ..	264	259	252	261	260	255	255	261	259	261	260	261	259	0 0	264	10 50	251
10 ..	260	260	259	263	258	248	241	258	259	258	259	263	258	6 38	267	11 36	238
11 ..	258	258	258	261	258	245	239	263	255	255	258	258	256	6 28	264	10 30	234
12 ..	262	264	256	264	255	242	239	267	266	262	265	264	259	14 36	270	10 40	236
13 ..	265	265	264	269	271	254	246	262	259	262	266	266	262	6 50	274	11 24	244
14 ..	268	267	265	262	257	244	246	257	261	257	259	264	259	0 0	269	10 50	239
15 ..	263	264	261	263	259	250	251	267	263	252	254	259	259	14 52	269	9 33	249
†16 ..	259	258	258	262	249	239	239	260	261	257	262	265	256	22 0	267	10 30	230
†17 ..	266	267	265	271	268	237	251	273	274	260	263	268	263	14 24	277	10 36	232
†18 ..	267	262	262	265	261	249	243	258	263	257	258	259	258	6 40	269	11 24	241
†19 ..	258	257	254	256	251	230	236	254	257	253	256	257	252	22 0	263	10 4	226
20 ..	261	262	262	262	270	261	257	268	274	‡	‡	‡	264	.. ..	..	.. ..	..
21 ..	237	243	244	248	265	254	254	259	257	254	258	259	254	7 30	267	0 12	236
22 ..	261	260	262	263	262	248	248	267	267	260	265	266	261	6 24	270	10 36	238
23 ..	267	266	266	268	264	‡	‡	‡	222	229	236	242	252	.. ..	..	.. ..	..
24 ..	246	246	246	248	249	246	248	250	253	251	256	257	249	22 50	260	10 20	237
25 ..	260	260	260	261	266	255	253	261	262	259	263	267	261	21 56	269	10 36	251
26 ..	261	261	262	265	267	251	252	256	255	260	261	262	260	7 8	271	10 48	247
27 ..	262	261	259	260	263	236	238	244	241	241	241	246	249	7 4	265	10 42	228
28 ..	243	242	244	247	249	244	246	255	247	247	248	249	247	13 32	257	10 32	237
29 ..	250	249	252	250	254	244	250	255	249	252	253	252	251	6 52	259	10 32	240
30 ..	249	248	246	251	253	249	252	261	256	257	258	259	254	14 4	262	3 20	245
31 ..	255	253	253	253	256	269	274	272	272	273	275	273	265	12 32	277	1 38	253
Mean ..	257	257	256	259	257	244	244	259	257	255	257	259	§ 255				
†Mean ..	261	259	258	262	256	237	240	259	261	255	267	260	255				

* See footnote on page 60.

† Five international quiet days.

‡ Readings rejected as the instrument was disturbed owing to adjustment.
Daily means for the 20th and 23rd October are the means of 17 and 18 hourly values respectively.

§ Mean of 29 days.

Bi-hourly values of vertical force, 1921.

17000 γ *plus* tabular quantities.

November.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	*Daily mean.	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1 ..	268	267	266	267	269	268	270	269	267	266	268	268	268	12 40	272	10 16	262
†2 ..	266	265	260	261	260	237	243	239	242	232	245	258	251	0 4	267	17 20	228
†3 ..	262	266	269	271	280	274	273	280	276	274	275	275	273	7 40	281	0 0	261
†4 ..	273	271	268	268	273	251	260	277	267	266	267	266	267	13 32	278	10 20	248
5 ..	263	263	259	260	263	257	261	261	253	253	255	256	258	6 56	266	16 20	249
6 ..	252	252	247	248	260	247	248	258	249	252	258	255	252	7 44	261	4 50	242
7 ..	253	257	259	258	264	257	259	262	261	263	264	265	261	22 36	266	0 0	252
8 ..	262	262	259	259	262	251	257	252	262	261	262	262	260	6 48	265	9 58	248
9 ..	260	260	260	257	263	260	260	260	257	260	262	263	260	8 48	266	14 52	251
10 ..	263	262	258	258	261	265	264	268	270	274	276	279	267	22 4	280	3 36	255
11 ..	276	274	270	269	279	281	280	278	273	278	278	276	276	12 36	287	6 4	268
12 ..	276	274	272	274	276	275	272	276	273	277	278	278	275	18 38	279	4 52	270
13 ..	277	274	271	271	271	273	273	269	270	275	275	275	273	20 44	278	14 4	267
14 ..	276	273	275	277	275	261	264	269	271	272	273	272	271	5 51	277	10 40	256
15 ..	271	269	266	265	269	277	278	275	274	275	275	276	273	11 36	279	6 20	264
16 ..	275	272	267	266	278	262	255	256	259	263	258	266	264	8 24	279	10 42	246
17 ..	269	256	265	260	263	252	257	268	269	269	261	262	263	6 56	272	9 56	250
18 ..	268	264	266	264	266	255	257	262	260	262	260	264	262	2 52	271	11 4	252
19 ..	268	262	262	262	265	258	263	259	261	262	262	261	262	0 0	268	9 38	255
20 ..	263	263	261	260	263	247	247	248	247	254	252	253	253	0 0	264	10 36	242
21 ..	257	254	252	254	259	248	257	258	263	258	258	256	256	8 20	263	10 18	246
22 ..	261	260	258	258	262	254	249	251	265	266	266	265	260	17 20	268	10 56	248
23 ..	268	265	266	267	270	269	256	261	267	264	264	264	265	8 36	274	12 0	254
24 ..	259	264	265	266	268	253	252	259	261	264	265	263	262	0 30	272	11 4	250
25 ..	265	264	265	266	272	273	272	269	267	268	268	269	268	8 48	277	4 12	263
26 ..	269	271	271	274	276	277	271	272	268	268	268	268	271	10 8	278	16 56	265
†27 ..	267	268	264	264	267	264	264	266	263	265	267	266	265	13 4	270	10 52	260
28 ..	264	266	265	265	266	260	263	269	259	264	264	263	264	12 56	273	13 56	257
†29 ..	264	263	261	261	265	262	263	270	263	263	263	263	263	12 56	273	6 24	256
30 ..	261	261	260	260	264	246	256	261	265	264	265	264	261	16 4	266	9 50	246
Mean ..	266	265	264	264	268	260	261	264	263	264	265	266	264				
† Mean ..	267	267	264	265	269	257	261	266	262	260	263	266	264				

* See footnote on page 60.

December.

Date.	HOURS. 0	2	4	6	8	10	12	14	16	18	20	22	*Daily mean.	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1 ..	263	263	262	263	263	255	264	280	273	270	267	267	266	13 50	280	10 22	248
2 ..	269	268	264	265	267	268	263	274	270	268	270	271	268	14 8	276	3 32	262
3 ..	270	269	267	267	274	262	253	262	269	268	269	270	267	7 30	275	11 36	251
4 ..	270	267	266	266	270	267	257	258	264	263	264	263	265	7 36	271	12 0	256
5 ..	264	263	262	262	267	268	263	266	267	266	267	267	266	8 28	270	3 51	262
†6 ..	267	267	265	264	272	263	262	260	255	259	261	260	263	8 20	274	15 0	254
† 7 ..	262	261	260	260	263	265	259	268	270	269	268	268	265	16 20	271	10 42	257
8 ..	267	265	266	267	267	265	276	260	259	264	262	263	265	11 40	277	5 4	256
9 ..	263	263	259	260	261	264	271	263	263	267	265	265	264	11 44	272	2 24	258
10 ..	264	263	262	262	259	260	264	264	258	263	261	257	262	12 40	268	20 40	255
11 ..	259	257	256	256	260	264	267	262	262	266	266	264	262	12 24	269	3 0	254
12 ..	266	259	261	254	262	240	254	258	251	254	257	257	256	0 32	267	9 48	238
13 ..	259	260	258	260	266	266	276	275	267	277	273	273	268	13 4	280	0 50	257
14 ..	276	277	276	280	281	289	286	287	276	278	277	277	280	12 34	290	1 0	272
†15 ..	276	276	275	273	275	280	279	280	277	275	276	275	275	12 36	283	6 28	267
†16 ..	277	274	273	272	277	272	267	258	257	256	253	256	265	9 8	279	20 32	252
17 ..	262	263	262	263	268	278	271	273	273	267	268	268	268	9 24	279	3 42	261
18 ..	272	269	267	269	268	264	254	266	262	264	264	264	265	0 0	272	11 36	253
†19 ..	268	266	266	266	270	267	267	270	267	267	264	264	266	7 44	270	9 36	261
†20 ..	272	272	274	274	276	258	257	258	258	263	263	264	266	5 40	276	11 28	256
†21 ..	269	270	269	268	275	270	260	260	269	264	264	264	266	8 4	276	12 8	258
22 ..	266	263	265	264	264	262	255	259	260	261	261	259	262	8 56	270	11 40	251
23 ..	262	261	259	258	263	265	262	254	264	264	262	262	262	16 20	267	14 0	253
24 ..	259	260	258	257	264	262	258	249	254	260	257	257	258	9 16	270	14 4	248
25 ..	255	254	251	252	254	262	258	256	259	255	255	253	255	9 44	263	6 44	247
26 ..	254	252	250	250	254	261	268	274	280	281	282	286	267	20 52	287	6 40	247
27 ..	281	276	274	278	280	291	293	291	277	288	286	285	284	10 32	296	3 48	269
28 ..	278	275	273	274	280	286	288	278	276	279	278	276	278	10 52	296	5 0	266
29 ..	271	268	271	270	274	281	276	276	275	269	271	272	273	10 20	284	6 56	266
30 ..	266	264	263	264	266	274	272	272	264	265	266	264	266	10 6	275	4 40	261
31 ..	261	260	259	260	264	287	286	280	263	269	268	268	269	9 36	287	3 38	257
Mean ..	267	265	264	264	268	268	267	267	266	267	267	266	267				
† Mean ..	268	267	267	266	271	265	261	263	264	264	264	264	265				

† Five international quite days.

Magnetic Storms.

Magnetic disturbances are classified at the Bombay (Alibag) Observatory into four groups: Small, Moderate, Great and Very Great. In the following table the days on which disturbances of types classified as Moderate, Great or Very Great were recorded are tabulated; where a storm began abruptly, the time of beginning is given correct to the nearest minute.

The storm which began on May 13, 1921, is so violent and presents so many interesting features that a description of it here may not be out of place. The disturbance is one of the greatest that have been recorded during the past 50 years. In point of duration there were only two disturbances, in July 1883 and May 1891, respectively, which lasted for a longer time than the present one; but they were not so violent in character. The one in July 1883 lasted for about 98 hours, and the other in May 1891 lasted for 92 hours. In point of intensity, of the several magnetic storms recorded at this observatory only three, which occurred on October 31, 1903, September 25, 1909 and August 11-12, 1919, respectively, seem to be comparable with the present storm.

May 12 was a day of moderate disturbance. A small rise in horizontal force was noticed at 11^h (local mean time), the force steadily rising for about two hours with very small oscillations. At 13^h 5^m there was again a second small rise and then the horizontal force fell gradually by about 164 γ in five hours. The conditions thereafter remained practically normal for about a day.

On May 13, however, the horizontal force rose suddenly at 18^h 2^m by about 130 γ—a rise so characteristic of "sudden commencements of magnetic storms" that it may be taken as the beginning of the great storm. The force then fell more or less steadily till May 14, 0^h. From that time for about three hours the force underwent violent fluctuations, the range being as much as 207 γ. This interval may be considered to be the most disturbed period of May 13 and 14. After this for about a day the magnetogram showed the ordinary variations of horizontal force in a magnetic storm—more or less slow rises and falls with minute pulsations superimposed.

At 3^h 6^m on May 15, however, the horizontal force suddenly rose by about 230 γ, and the rise was so large and so rapid that one would be inclined to consider that there were really two storms, one following close upon the other. The magnet remained swiftly swinging and the horizontal force then fell rapidly taking the spot of light out of the margin of the photographic paper. A deflector magnet was placed in its position to secure the curve from May 15, 8^h 6^m, to May 16, 5^h 4^m, but still the spot remained off the paper between May 15, 8^h 16^m, to 10^h 41^m. During this interval the horizontal force must have reached its minimum point. The most disturbed period of the storm seems to have been from May 15, 3^h to May 15, 14^h. This interval was followed by a "laboured rise" of 400 γ in 17 hours, attended by more or less regular oscillations. But again at 9^h 30^m, May 16, a steady fall began. The spot of light went off the paper for a second time and the deflector magnet was brought in at 14^h 6^m, May 16, to secure the curve. From this time, however, the horizontal force was seen to recover; and at 4^h 26^m, May 17, the deflector magnet was taken away. The disturbance itself seems to have ended at about 12^h, May 17.

The total range in horizontal intensity (H) in this disturbance was over 700 γ. The maximum range recorded on the paper was 29′ of arc in declination (D), and about 135 γ in vertical intensity (Z).

Principal magnetic disturbances, 1921.

Date.	Bombay civil time of beginning.	Duration in hours.	Relative magnitude.	Remarks.	Date.	Bombay civil time of beginning.	Duration in hours.	Relative magnitude.	Remarks.
	h. m.					h. m.			
March 13 ..	20 0	76	M	Commence ment gradual.	May 12 ..	10 59	123	V.G.	Commencement sudden.
					„ 20 ..	0 55	80	M.	Do.
„ 21 ..	20 26	43	M.	Commence ment sudden.	September 2 ..	8 30	17	M.	Do.
					October 7 ..	18 0	42	G.	Commencement gradual.
April 18 ..	19 22	19	M.	Commence ment sudden.	November 16 ..	4 48	89	M.	Commencement sudden.
„ 29 ..	0 20	37	G.	Do.					

Seismic Disturbances, 1921.

Apparatus—*Omori-Ewing Horizontal Pendulum (E-W).*

	V	To	G	$\frac{V}{To^2}$
AE:	20	32	..	..

Date.	Phase.	Time G. M. T. H. M. S.	Amplitude (μ) A.E.	Remarks.
1921 January.	No seismic disturbance was recorded during the month.			
„ February 4	P	8 42 17		Maximum cannot be determined as the movements are very small.
„ „ 17	P	.. .. ..		Time cannot be determined owing to the failure of time marks.
„ „ 21	P	2 2 0		
	S	2 3 17		
	eL	2 3 47		
	M	2 4 13	80	
„ „ 27	P	18 44 2		
	eS	18 53 47		
	eL	19 21 16		
	M	19 33 40	50	
„ March 28	P	9 10 5		
	M	.. .. ..		Maximum not well marked movements are very small.
„ „ 30	P	10 30 18		
	S	10 33 47		
	L	10 35 0		
	M	.. .. ..		Maximum not well marked.
„ „ 30	P	15 12 12		
	M	.. .. ..		Maximum cannot be determined as the movements are very small.
„ April 1	P	4 12 58		
	S	4 17 59		
	M	4 25 23	135	
„ „ 2	P	.. .. ..		Times cannot be determined owing to the failure of time marks.
„ May 14	eP	21 33 36		
	M	.. .. ..		Maximum cannot be determined as the movements are very small.
„ „ 20	P	0 46 19		
	S	0 49 28		
	M	0 49 38	125	
„ August 14	eP	13 23 14		
	eS	13 27 45		
	M	.. .. ..		Maximum not well marked.

Date.	Phase.	Time G. M. T. H.	M.	S.	Amlitude (μ) A.E.	Remarks.
1921 September 5	P	20	34	59		Maximum not well marked.
	M	..	..	..		
,, ,, 11	P	4	10	16		
	S	4	17	35		
	M	..	..	..	1775	Time cannot be determined owing to failure of time-marks.
,, ,, 13	P	3	29	34		
	M	..	..	..		Maximum not well marked.
,, October 14	P	16	54	31		
	M	..	..	..		Maximum not well marked.
,, ,, 26	P	7	7	18		
	S	7	8	41		
	L	7	10	15		
	M	7	9	26	60	
,, ,, 26	P	23	5	32		
	M	23	6	37	35	
,, November 7	P	16	17	13		
	M	16	30	25	45	
,, ,, 11	P	1	25	36		
	M	..	..	..		Maximum cannot be determined as the movements are very small.
,, ,, 11	P	18	45	46		
	S	18	53	18		
	EL	19	1	32		
	M	19	5	52	1735	
,, ,, 15	P	20	40	26		
	S	20	43	36		
	M	20	43	47	860	
,, December 18	P	15	47	50		
	M	..	..	..		Maximum cannot be determined as the movements are small.

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Fourier analysis of diurnal and annual variations of the horizontal force for the five international quiet days during 1921.

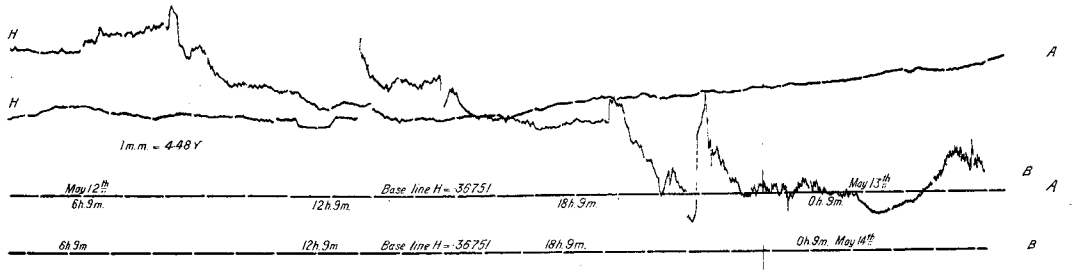
Diurnal variation : $\Delta H = c_1 \sin(\theta + \phi_1) + c_2 \sin(2\theta + \phi_2) + \ldots\ldots$; θ is counted at the rate of 15° per hour from mid-night to mid-night. (G. M. T.).

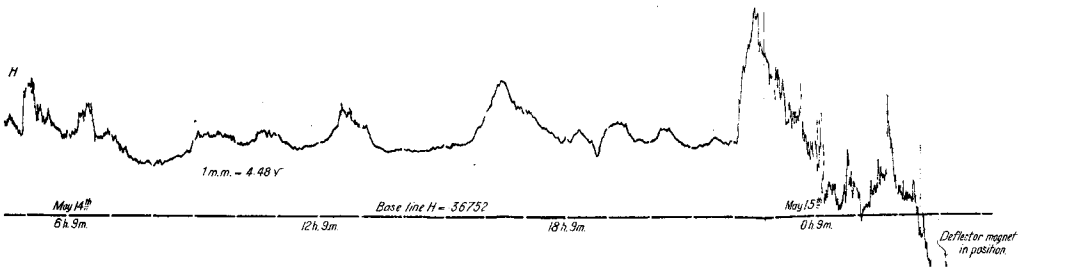
Annual variation : $\Delta H = c_1 \sin(\theta + \phi_1) + c_2 \sin(2\theta + \phi_2) + \ldots\ldots$; θ is counted at the rate of 30° per average month.

Quantity.	Diurnal variation.												Annual variation.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
c_1 ..	5·75	12·29	18·13	16·72	14·80	11·49	16·21	13·11	16·51	11·52	16·62	10·81	14·97
c_2 ..	6·06	8·33	10·67	10·67	10·49	8·18	11·84	8·97	8·95	8·05	9·34	5·16	14·13
c_3 ..	3·05	3·76	5·12	5·52	3·30	3·50	3·18	4·49	3·97	3·81	4·16	2·35	7·73
c_4 ..	0·99	0·73	0·85	2·11	1·76	0·84	1·14	3·08	1·13	1·02	0·98	0·35	0·63
	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′
ϕ_1 ..	358 48	348 18	343 57	339 20	345 5	350 56	349 3	346 54	343 45	341 57	358 41	4 47	112 48
ϕ_2 ..	207 45	229 26	243 30	247 38	235 34	243 52	245 11	241 55	239 44	239 37	264 54	251 21	4 55
ϕ_3 ..	118 25	144 45	164 43	163 22	161 17	162 52	149 10	149 36	177 33	164 28	184 49	174 52	211 25
ϕ_4 ..	41 44	14 14	77 6	78 48	109 59	246 48	203 52	12 57	114 32	71 2	110 50	220 26	288 26

Plate I.

ALIBAG OBSERVATORY MAGNETOGRAMS, 1921.

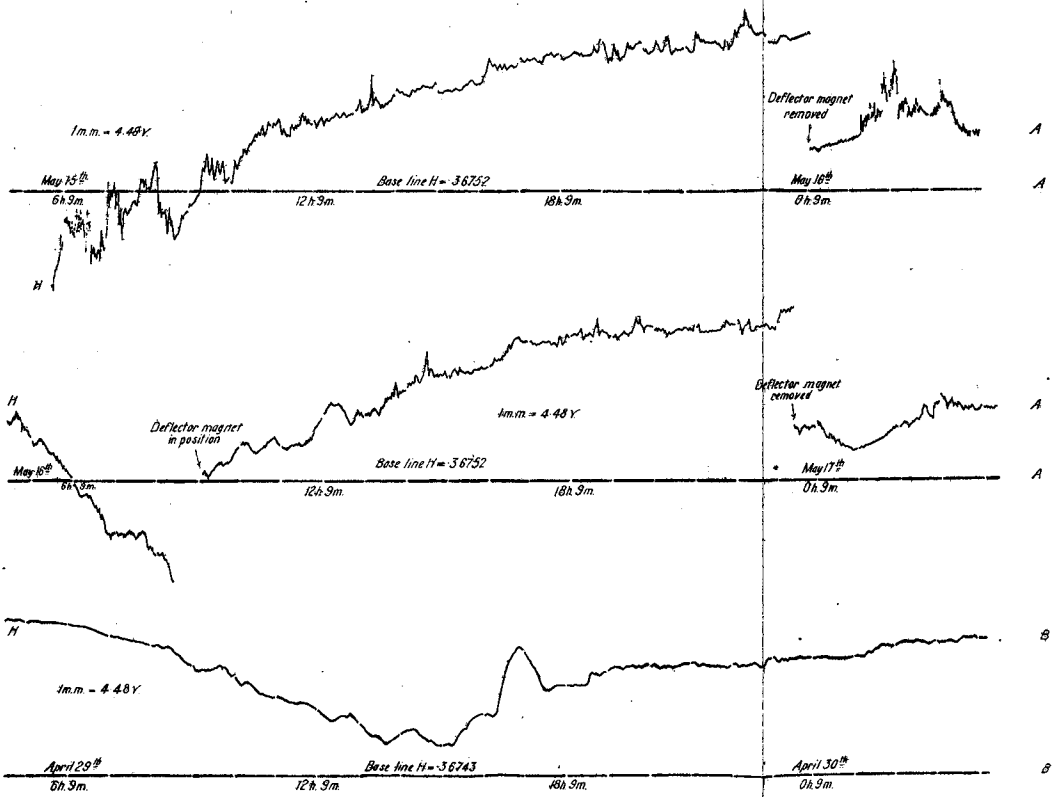




133562

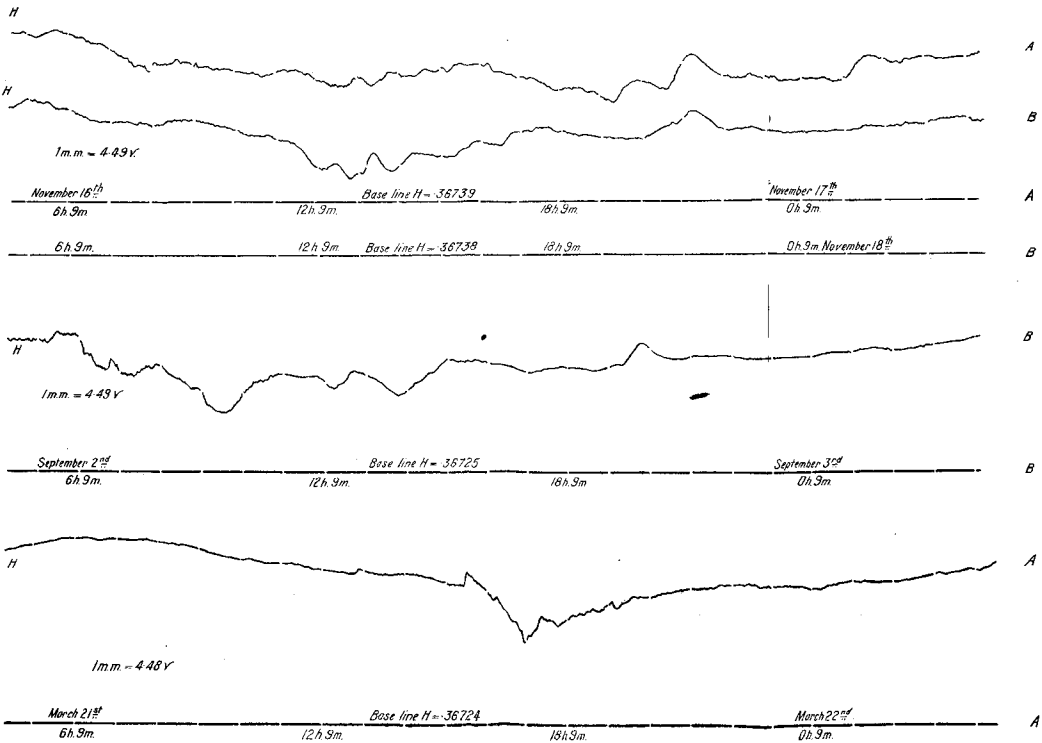
ALIBAG OBSERVATORY MAGNETOGRAMS, 1921.

Plate II.

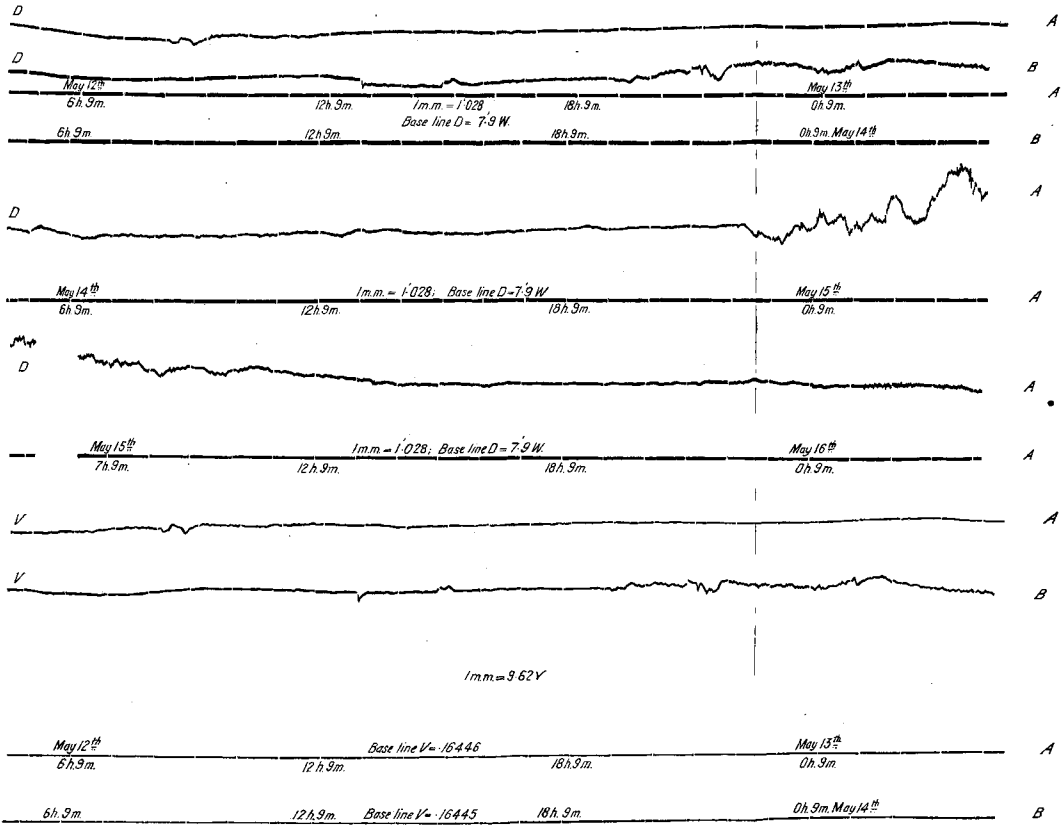


ALIBAG OBSERVATORY MAGNETOGRAMS, 1921.

Plate III

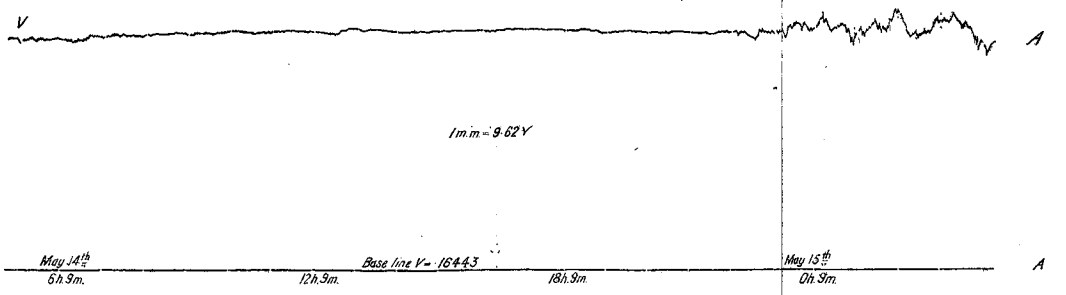


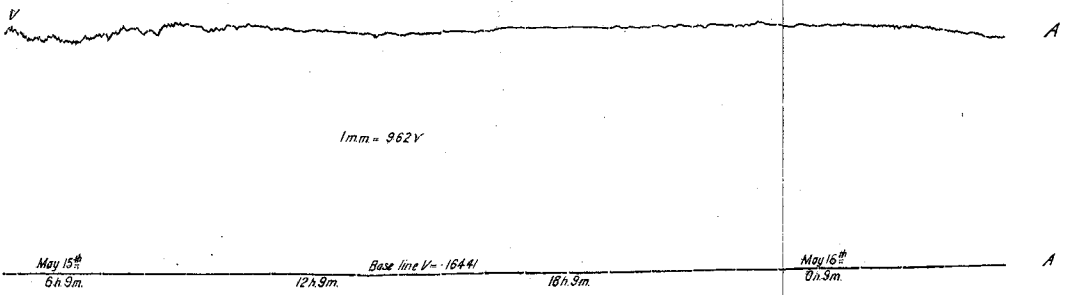
ALIBAG OBSERVATORY MAGNETOGRAMS, 1921.



Alibag Observatory Magnetograms, 1921.

Plate V.





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